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A REMARKABLE STATEMENT ABOUT RAILROADS BY E. H. HARRIMAN.

THAN E. H. Harriman, probably no greater railroad up-builder ever lived in this country. A statement credited to him in George Kennan's biography and quoted by the Wall Street Journal, is so directly contrary to the views of many railroad officials as to be of profound interest in this day of agitation for and against high freight and passenger rates—for freight and passenger rates alike are too high for the best interests of the railroads and of the country.

Mr. Kennan quotes Mr. Harriman as having written fourteen years ago the following remarkable statement:

"It is just as impossible to raise rates to any level that may be necessary to pay charges on increased capitalization as it would be for a manufacturer of steel, or of woollens, or of any other commodity, to raise his prices because he had a large debt upon which it was necessary to pay interest, or a large capital employed in the business. It would be suicidal for a railroad company to throttle or paralyze the industries along its lines by charging exorbitant rates. Even if there be no direct competition by parallel roads, every industrial plant located along a line of railroad is competing with plants located on other lines, and every railroad is forced to make such low and reasonable rates as will permit the industries in the territory tributary to it to make sales in competitive markets, and thus furnish the traffic from which the railroad company derives its earnings.

It is impossible for a railroad company to sever its interests from those of its patrons. Its life blood is drawn from their prosperity, and it must furnish them with adequate and ever-increasing facilities at reasonable rates, wholly irrespective of its capitalization. If the calculations of the organizers of a railroad company turn out to be erroneous, and the capitalization is fixed at too high a figure, it is a misfortune for them and the other security holders; but the widespread popular impression that a railroad company can extort money from the public at will, and in defiance of the laws of trade, simply for the purpose of paying interest or dividends upon increased issues of securities, is not justified by the facts."

REMARKABLE CHANGE IN STEEL TRADE INDICATIVE OF REVIVING BUSINESS.

REVIEWING the remarkable increase in steel production now under way, our Pittsburgh correspondent in his letter in this issue says:

"The reversal in the steel market is phenomenal even for the steel industry, accustomed as it is to see sudden changes. It is scarcely three months when steel prices were at their lowest and there was only a buyers' market. Now there is strictly a sellers' market."

From time to time during the last few months we have pointed out the trend to better conditions in business and noted the increased activity in construction work in all lines of building operations. What has taken place in the remarkable change in the steel industry and in the pig iron market is spreading to other lines. Indeed, some other lines felt the effect of the betterment even before iron and steel.

Indicative of the confidence in the future is the fact that the Steel Corporation is preparing to spend about \$30,000,000 in the enlargement of its by-product coke operations near Pittsburgh, and that the same company through its subsidiary the Tennessee Coal Iron & Railroad Co. will greatly enlarge its operations in the Birmingham district. Mr. George G. Crawford, President of the Tennessee Company, in giving the MANUFACTURERS RECORD information in regard to the new merchant mill to be built at once writes:

"A new merchant mill will be constructed at the Fairfield Works, so located as to receive billets from the Fairfield blooming mill, to which tables will be added so that long billets can be delivered to the merchant mill without the necessity of switching cars.

"The new merchant mill will consist of a roughing train of 6 stands of 16-inch rolls, an intermediate mill of 5 stands of 12-inch rolls, and a finishing train of two stands of finishing rolls, provided with 11-inch pinions, making it possible to use either 10-inch or 12-inch rolls.

"A mechanical hot bed, 255 feet in length, will receive the hot bars from the roll trains, and, after cooling, the bars will be sheared and stocked in a storage and shipping room especially adapted for storing concrete re-inforcing bars and with storage capacity for a limited tonnage of merchant bars. The bar mill and stocking building is 80 feet wide and 820 feet long, and will be erected by the Tennessee Coal, Iron & Railroad Company.

"The capacity of the mill is estimated at 10,000 tons of plain or deformed bars, rounds or squares, per month. The mill is to be built to care for the increased demands for bars in the Southern territory and for export. Materials for the construction of the mill will be ordered at once and construction will begin as soon as the materials are received."

Judge Gary wires the MANUFACTURERS RECORD that this mill will cost about \$1,000,000.

It is especially gratifying that the increased demand for bars in the Southern territory and for export trade from Birmingham is responsible for this enlargement of the Steel Corporation's operations in Alabama. These things are but indicative of the movement for business betterment which is now in evidence in all parts of the country.

Railroad traffic is steadily increasing and the number of idle cars decreasing. Building activity is going forward at a rate which gives promise of making this year the most notable one in the history of American building operations, just as it will mark the highwater point up to the present in highway construction work. We are launched upon a campaign for highway work on a scale indicated by the mere fact that North Carolina is carrying on an aggressive highway campaign involving the expenditure of \$50,000,000 for new roads, and this is typical of what other states are doing, and what others which have not yet announced such a highway building program will necessarily be forced to undertake to keep up with the march of events.

The time is very near at hand when all transportation facilities will be overburdened, when railroads will be wholly unequal to carry the volume of traffic offered, and when every available motor truck which can be operated over a good road will find more business offering than it can take care of.

There are still many sore spots left by the disastrous deflation of the Federal Reserve Board's mismanagement of affairs. There are still thousands of bankrupts who will never be able to regain their feet financially. But the wreck and ruin which was wrought through mismanagement commenced to clear away just as soon as the country came to a full realization of the fact that all of the policies of the Federal Reserve Board had been reversed and that we had entered upon a more intelligent financial management, wholly contrary to all of the teachings of the Governor and the Vice Governor of the Federal Reserve Board, who now find themselves discredited by all thinking men who have broadly studied world financial matters.

Except for the purpose of making sure that there shall never again be such disastrous mismanagement, we might now forever dismiss the Federal Reserve Board as the country marches forward to a revival of business which will soon overtax all of its transportation facilities.

Discussing the remarkable improvement in the iron and steel trade, The Matthew Addy Co. of Cincinnati, iron merchants, write:

"Another week of exceedingly heavy buying in the Iron Trade—and again the furnaces have had the novel experience of picking and choosing. A short month ago any kind of an order was welcome. Now furnace order books are getting well filled and iron masters are able to dictate their own terms. When this buying movement began there was no surplus stock of iron in the country and it is now very evident that a shortage is developing. Apparently the melting end of the trade is developing more rapidly than the producing end. In other words, it is easier to start up a foundry than it is to start up a furnace.

"The Iron Trade has no lopsided increases—it is increasing all around in every department. Steel is leading but the iron melters are not far behind. Sales of basic, Bessemer and Foundry Irons have been large—and prices keep on advancing.

"The coal strike is not the cause of the betterment in iron. All that it did was to emphasize the fact that supplies of

raw materials were at a dangerously low point. But if the coal strike continues it will ultimately reduce the production of iron.

"Some odd facts which are most significant come out in this process of industrial rehabilitation. A nearby malleable shop in 1920 employed 285 men. It is at present getting out exactly the same tonnage as then with 207 men—and as a rule the efficiency of labor has so greatly increased that the proportion is even greater than in this case.

"The whole Iron Trade is optimistic. Since September last there has been a steady betterment which in the past sixty days has been going at a continually accelerating rate. It looks every day more and more like the real thing—looks as if business had come to stay and that President Harding's desire—which everybody shares—for normalcy was in a mighty fair way to be realized sooner than we had thought possible."

LABOR UNIONS AND OTHERS AS LAW VIOLATORS.

THE murders committed in Chicago by Labor men, the murders committed in the West Virginia coal districts by Labor men, and the facts which are being brought out in the trial of coal mine laborers for treason, are indicative of the spirit of lawlessness due to radical leaders in Labor Union work when radicalism gains control. Too often men are taught that murder committed by Labor men is not murder. Too often men who murder non-union men because of the hatred aroused against men who are willing to work untrammelled by Labor Unionism, are upheld by Union leaders as though it were not a crime to murder a man who did not belong to a Labor Union.

The spirit of hostility to the courts in the recent statement of Samuel Gompers, which seems but to voice the spirit of many Labor leaders, must be curbed, or else the safety of this country will be endangered.

Men must be taught that crime is crime, whether it is committed by the bootlegger or by the bootlegger's accomplice who buys and drinks the bootlegger's whiskey; whether it be committed by a man of supposed social position or of wealth, or by the bootlegger in his murdering campaign, or by the Labor man who disregarding law seeks to force all other men to come under the domination of Unionism.

The violator of the law must be made to realize the crime of law-breaking. He must be made to understand that in this country law is supreme, and he who violates law must be punished regardless of his position.

The crimes committed in the name of Labor Unions are constantly emphasizing the supreme importance of the Open Shop as the only safeguard of American Liberty.

The crimes which are being committed by the bootleggers and by those who buy the bootleggers' whiskey and thus become their accomplices, must be punished to the utmost degree of the penalty imposed by law. We cannot have law enforced against the Union Labor murderer unless we enforce the law against the bootlegger and his accomplice, the buyer and the drinker of his whiskey.

All criminality of this kind should receive the unrelenting, untiring hunting down and punishing which individual States and the Federal Government can put into effect if the nation is to be saved from utter ruin by radicalism in Labor Unions on one side, and the radicalism of the violators of the Prohibition law on the other side.

The Government needs more revenue. In that respect it is typically American.

Men die, but the writing of the new tariff bill apparently goes on forever.

Manufacturers Discuss Prohibition as an Economic and Moral Issue and Its Influence for Safety in Factories and for Efficiency in Work.

THE views of hundreds of manufacturers, bankers, lawyers, physicians and educators as to the vital relation of Prohibition as an economic factor in the welfare of the country as well as the moral issue involved, will be strikingly presented in an 84 page book entitled "The Prohibition Question, Viewed From the Economic and Moral Standpoint" which has just been issued by the MANUFACTURERS RECORD. It is well nigh impossible out of the hundreds of letters which have been received to make any summary which at all presents the amazingly strong arguments advanced for Prohibition by manufacturers and others. But picked at random here and there as indicative of hundreds of similar statements in letters equally strong from leading manufacturers, all of which will appear in full in "The Prohibition Question" are the following brief sentences:

Judge Gary of the United Steel Corporation in reply to a questionnaire as to whether he is still opposed to the liquor traffic to the extent that he was when he signed a petition to Congress some years ago, heartily commends Prohibition and writes:—

"Yes, results have fully justified Prohibition legislation," and he says that he can see no reason to change his opinions, and adds: "I endorse the admirable expressions of President Harding on this question."

The expression of President Harding to which Judge Gary refers is as follows:—

"In every community men and women have had an opportunity now to know what Prohibition means. They know that debts are more promptly paid, that men take home the wages that once were wasted in saloons; that families are better clothed and fed, and more money finds its way into the savings bank. The liquor traffic was destructive of much that was most precious in American life. In the face of so much evidence on that point what conscientious man would want to let his own selfish desires influence him to vote to bring it back? In another generation I believe that liquor will have disappeared not merely from our politics, but from our memories."

In closing his statement Judge Gary adds that drunkenness is not as common at present, so far as he can learn, as under the open saloon and free liquor traffic.

R. A. Cochran, Treasurer of the Maysville Cotton Mills, Maysville, Ky., reports that there "are no longer any blue Mondays in their factory on account of drinking, as formerly, and that the saloons in their neighborhood have given place to grocery stores, and the boys are growing up without forming the habit of drink."

The Canton Malleable Iron Co., Canton, Ohio, reports that there is "no question that accidents have been reduced in their plant and that they would dread to see the day when liquor of any kind would be put into general use again."

John C. Haswell of the Dayton Malleable Iron Co., Dayton, Ohio, says "drunkenness is not as prevalent as formerly, and with a decrease in the vast numbers of absentees from drink as before Prohibition." He is "opposed to the liquor traffic per se, opposed to it because it is a violation of the laws of the country, and because wherever you find trouble you usually find liquor."

J. J. Phoenix, president of the Bradley Knitting Co., Delavan, Wis., says, "better living, better clothing, cleaner and better social life, happier homes with more contentment, better and steadier workmen averaging more efficiency and with less sickness and lost time, are some of the benefits to the workers and to society in general. Drunkenness is not one-twentieth as much as in the days of the open saloons." Like

law, and says, "if the so-called wealthy men of affairs will many others he denounces the violation of the Prohibition not respect the laws of our country, why should we complain of the bootlegger and illicit distiller?"

Vice President Seltzer of the Ohio Cultivator Co., Bellevue, Ohio, writes: "Prohibition is unquestionably the greatest thing that has happened in many years. Many laboring men who have paid their bills have been able to buy clothes for their families and have started bank accounts since Prohibition came into effect as a result of it."

Vice President Fancher of the Fifth Avenue Bank of New York, reports that "Prohibition has been far-reaching in its effect and in the benefits already derived. Those who are raising the most objections to it are the people who take a rather narrow and selfish view."

President North of the American Soda Fountain Co., of Boston, reports that all "employers even from a purely economic standpoint, regardless of their personal opinion, will agree that Prohibition has been beneficial both to the workmen and business, and he reports that "so far as his observation goes in clubs, hotels and other public places, drunkenness has decreased so far as to be almost negligible!"

General Sales Manager Sibley of the Birmingham Clay Products Co., a former president of the Birmingham Chamber of Commerce, basing his statements on thirty years of experience in the mineral regions of Alabama, contrasts "the awful and tragic conditions prevailing in the days of the open saloon, with crime, and poverty and their brood of shame, crime and suffering, inefficiency, ignorance and disease" with the present "living conditions so vastly improved; where peace and happiness prevail as a rule in family life, and the children are enjoying greater and better educational opportunities than ever before. Drunkenness is almost obsolete and would be entirely but for the persistent efforts of the bootleggers. From an industrial standpoint alone the employers of Alabama have found Prohibition one of their most valuable assets, as well as a safeguard to property and persons of themselves and of employees."

The Gulf States Steel Co., of Birmingham, reports a decrease of at least 75 per cent in accidents as a result of Prohibition.

President Stone of the Brotherhood of Locomotive Engineers in a very strong letter denounces all violators of the Prohibition laws and says that drunkenness has decreased 75 per cent. President Stone thinks that the sooner the "Smart Set" who violate the Prohibition laws kill themselves by drinking bad whiskey the better it will be for the country.

H. B. Smith, secretary of the McInnes Steel Co., Corry, Pa., says "Prohibition has done wonders in this city for the working men not only in reducing accidents, but in bringing their people to a higher standard of citizenship. With the liquor traffic out of existence the workmen and their families are enjoying to the full extent what the American home stands for."

Louis C. Walker, president of the Aermotor Co., manufacturers, of Chicago, Ill., writes that "even partial enforcement of Prohibition has demonstrated that a thorough enforcement would bring to the women and children of the land a greater blessing than any other law we have ever enacted," and he adds, "I am unable to understand how any man who will give the subject thorough consideration is willing to jeopardize this blessing to the women and children in order to satisfy his own personal desires for alcoholic stimulants."

Wm. E. Follansbee, president of the Follansbee Bros. Co.,

steel manufacturers, of Pittsburgh, reports that the experience in their operations from the abolition of the liquor traffic has proven Prohibition to be recognized by all sections and people in all conditions of life, and adds, "none are more appreciative of the benefits than those who are ordinarily designated as working people."

E. H. Campbell, mining engineer, of Iron River, Mich., "reports a decrease in the number of days of absence from work due to accidents of 68 per cent. Investigation in a large organization near by showed similar results."

A. M. Todd, president of the A. M. Todd Co., manufacturers, of Kalamazoo, Mich., writes that he believes that no nation can prosper so long as the liquor traffic is permitted to exist, and he regards the present Prohibition law as the most important act of legislation in America for the present century.

President Swift of the National Bank of Auburn, Auburn, N. Y., says 60 odd saloons in Auburn were put out of business by the 18th Amendment, but instead of this being a disaster to the town, every place formerly occupied by a saloon is now occupied by some legitimate commercial enterprise including a few places which are selling soft drinks. "Owners of stores formerly used for saloons are getting more income than ever before. We are witnessing the struggle of the liquor interests to live, but the business is surely going to die."

President Gillespie of the Lockhart Iron & Steel Co., Pittsburgh, reports that their "experience under Prohibition has made them more determinedly opposed than ever to the liquor traffic. The men are saving money, buying homes, and providing for their families the comforts of life as never before. Laborers no longer go to the polls partly stupefied by liquor to vote at the behest of the saloon politician, and the younger generation is being trained in habits of sobriety."

Dr. H. E. Roberts of the Mayo Foundation, University of Minnesota, says: "That people who have no self control or knowledge enough to stay away from harmful stimulants should not be forcefully protected from their own indulgence is a monstrous proposition."

President Hodge of the Kalamazoo Paper Co., Kalamazoo, Mich., says, "The cause is really winning, and to allow light wines and beers to be made would be to unlock a door which is now securely locked. With a population of 50,000 the banks and merchants are unanimous in the opinion that men are saving more money and paying their bills more promptly, and drunkenness is not nearly so common as it was. It will be a poor time for any one who signed that petition to change their views in that line, as the cause is really winning and any yielding now would undo all the work that has been done."

Lindsay Bros., Inc., manufacturers of agricultural implements, Milwaukee, Wis., reports that even with imperfect enforcement of the new laws governing Prohibition, and the large foreign population, the advantage of the act seems beyond question, and drunkenness is not as common as before the act.

The Keyless Lock Co., of Indianapolis, reports that "we can now see that the liquor traffic was a more deadly and dangerous peril than we even imagined. Its lawlessness before is only equalled by its lawlessness now in breaking every law having to do with it. Essentially drunkenness and liquor are outcasts by nature and must be treated only as such. A wonderful difference is reported in the condition of the workmen who live better, in better houses, and most of them have money in bank."

S. F. Bowser & Co., manufacturers, of Ft. Wayne, Ind., say they are a thousand times glad that Prohibition has come, and has come to stay, and "we pray God that it may be respected and appreciated by all the world for the good that it is doing."

Secretary Willock of the Waverly Oil Works, Pittsburgh: "It would be unthinkable for any amendment to be adopted permitting beer and light wines, because it would be nothing more or less than an acknowledgment of the inability of America to enforce her laws."

President Spencer of the Peoples Bank and Trust Co., Passaic, N. J., writes: "I know it to be a fact that Prohibition has improved the mental, moral and physical condition of the operatives in the mills; and a large number of women who have opened savings accounts have said that the money was that formerly spent in the saloons."

D. M. Bare, of the D. M. Bare Paper Co., Roaring Spring, Pa., says: "The liquor traffic is evil, and only evil. Prohibition is a great blessing, and our children's children will probably wonder why their ancestors ever permitted such an iniquity as the saloon to exist in this land."

President Marsh, of the Standard Underground Cable Co., Pittsburgh: "My observation of Prohibition has been that it is an incalculable economic and moral blessing to millions of our people and to the nation as a whole. There is far less drunkenness, and waste of time and money; there is greater steadiness among laborers, more saving of money, better care of the homes and women and children of the men who formerly spent freely for drink. No conscientious man would vote to bring back the liquor traffic."

Ralph W. Harbison a leading manufacturer of Pittsburgh, reports that "since Prohibition went into effect there has been a very definite decrease in drunkenness and abject poverty caused by the former wide consumption of liquor. The coming generation will probably see very little of the use of liquor as we have known it in past years, and the people generally will soon begin to forget their desire for it as it becomes scarcer."

A. B. Farquhar, of York, Pa., one of the foremost manufacturers of the United States, writes: "The drinking of alcohol is an unmitigated curse—next to war the greatest curse that afflicts mankind. Prohibition, notwithstanding violation of the law, which is more or less a passing phase, has already proved to be of the greatest benefit to the country."

James Logan, general manager of the United States Envelope Co., Worcester, Mass., says, "Give the Prohibition Amendment a chance, with proper enforcement of the law, and in my opinion no man who has the best interests of our country at heart would consider for a moment going back to old conditions. The so-called "smart people" who brag about being able to buy a quart of Scotch are breakers of the law and in the bootlegger's class themselves."

President Hammett of the Orr Cotton Mills, Anderson, S. C., thinks that "the return to the open saloon would be a crime against the people, and that drunkenness and brutality have been lessened by Prohibition."

J. R. Moore, Treasurer of the Alexander Mfg. Co., Forest City, N. C., writes, "I consider Prohibition one of the greatest blessings to the human race that has come about within a generation."

L. P. Hollis, of the Victor Monaghan Co., Greenville, S. C.: "In the South we have noted a wonderful change for the better along all lines of educational and church work, and the operatives are much more steady and of a higher type of character."

Secretary Jackson of the Roanoke Mills Co., Roanoke Rapids, N. C., writes: "There is no question in our mind but what Prohibition has been very beneficial to our town and community."

President McCall of the Opelika Cotton Mills, Opelika, Ala.: "Prohibition is of untold benefit to the individual who is practicing it and to those who are dependent on him for support. Conditions are so changed with us that we can

hardly realize we once had such a place as a grog shop, where rowdiness reigned and rottenness was constantly hatched out. May God give us strength in this nation to fight with sufficient might to prevent the return of such heinousness as reigned in the days of the legal sale of whiskey."

Sweet Steel Co., Williamsport, Pa.: "We have less lost time, fewer accidents and greatly improved social conditions in the families of our employees."

President Verity of the American Rolling Mill Co., Middletown, Ohio: "Less lost time, less accidents, less incompetence, less carelessness and inefficiency, better work, better homes, more thrift, happier families, and sober and safer and more efficient men who are finding out what it means to really live where they formerly merely existed."

N. G. Spangler, Gen. Mgr., Jackson Iron & Steel Co., Jackson, Ohio, after detailing the very great improvement that has taken place under Prohibition, says:

"It is our observation that the laboring man and the poor are not the law breakers, but that lies more largely with the rich and the well to do, who seem to think it smart. These are the real malefactors. Their smartness in this is the rankest stupidity, for as a class they would suffer most should the lawless get control and break up all law. The great trouble is not with the people at large; it is with the attitude of the daily press in its attempt to break down the Constitution. Their attitude encourages law breaking and makes spineless officials more lax. No good citizens will try to break down the Constitution for which millions fought and which is the foundation of the Republic."

W. A. Guack, Supt., Service Department, Carborundum Co., Niagara Falls, N. Y.:

"We believe Prohibition is a great thing. We want to see it remain the law of the land. We deplore the fact that there is bootlegging, but believe such traffic will gradually disappear and that the oncoming generations will know but little about liquor and its influence except from history."

Asa G. Candler, probably the foremost business man of Atlanta, says:

"No one not influenced by a desire to get money any way, regardless of the interests of all others, can dispute the position taken by the President. I regret to believe that there are men so selfish that they do not regard the life, liberty or prosperity of their fellowman. None but one who is blind, deaf and dumb, can dispute the statement that Prohibition in this, or any other community, has greatly benefitted employers and employees."

Edward L. Thomas, president of the Thomas Grate Bar Co., Birmingham, says Prohibition has worked wonders for industry and the homes of America, and adds:

"It makes no difference how distorted one's mind is, what we see speaks so loud that we cannot hear what the advocates of liquor say. The workmen are buying automobiles, homes, good clothes, substantial food; are enjoying life, are better citizens, better husbands, better fathers than under the wet regime."

R. M. Downie, Sec. & Mgr. of the Keystone Driller Co., Beaver Falls, Pa., writes that when the 18th Amendment was adopted they had some doubts as to the possibility of its enforcement, but that they have none now, and adds:

"At that time we thought the benefit of the amendment would be incalculable; now we know it. In our own factories in three states it has absolutely eliminated alcoholism as the procuring cause of accidents, penury and strikes. It will be a monumental crime of which the United States is incapable, as well as an irreparable calamity to return to the rule of alcohol. Speaking as manufacturers and employers this whole question is absolutely as undebatable as would be the question of the return of slavery."

F. N. Briggs, a manufacturer of Denver, and president of the Interstate Trust Co. of that city, says:

"I am not only in the banking business where I can observe the financial effects of Prohibition, but I am in the manufacturing business where we employ large numbers of men. We used to be constantly annoyed and our business interfered with after pay day by drunkenness and absenteeism. Under Prohibition we have none of either. The men are always on duty and ready for work. They hold their heads up. Nearly all of them save money. They take a pride in their families and they get large enjoyment of life. The open saloon and the liquor traffic were the greatest curse to American morals, American citizenship, thrift, comfort and happiness that ever existed in this land. They are now banished, let us never think of letting them return."

These brief extracts from a few letters are typical of the hundreds of letters which will appear in "The Prohibition Question." No one can grasp the full significance of this symposium without reading the book itself.

When we first sent out this questionnaire it was with the idea that we might receive letters enough to fill a 30-page supplement to the MANUFACTURERS RECORD, but the letters have crowded upon us so rapidly that instead of a Prohibition Supplement it has become necessary to print these letters in a special publication of 84 pages of the same size as the pages of this paper, as they had been set in that form as they came in from day to day. If printed in the usual form and sizes of book pages they would make a volume of 250 to 300 pages.

Every man in the country interested in the welfare of this nation, and who believes in Prohibition, from any standpoint will find it of interest to himself, to his associates, to his family and to his business, to buy a few extra copies of this book and distribute them in his community, for nothing of equal importance we believe has ever before been published in behalf of Prohibition.

This symposium is certain to attract world attention and be the basis for legislation in many other countries, as well as in the United States, for it shows in the view of the great leaders of America what has already been accomplished and what should be done to enforce Prohibition.

In reply to the questionnaire as to Prohibition and its effect, over 98 per cent of all the replies received are in favor of Prohibition in one form or another, about 7 per cent being in favor of beer and wine; but 85 per cent is the overwhelming verdict for strict Prohibition.

The price per copy of the "Prohibition Question" is 50 c. We invite the earnest co-operation in the distribution of this book of every reader of the MANUFACTURERS RECORD, of every advocate of Prohibition whether in the pulpit, or on the rostrum, in the counting-room, in the factory, in the bank, in the legal or medical profession; and, indeed, from men and women in all walks of life who want to advance the cause of humanity by eliminating forever from our country the curse of the liquor traffic and the bootleggers and the drinkers of the bootlegger's illicit whiskey.

In a careful compilation of all replies received by the MANUFACTURERS RECORD on the Prohibition Question, the tabulation gives the following remarkable results in percentages to total:

	Per Cent
For Prohibition in Some Form.....	98.50
Against Prohibition.....	1.50
For Strict Prohibition.....	85.50
For Beer and Wine.....	7.00
Against Volstead Law or Present Regulation	1.25
Wants Volstead Law Modified75
Advocates High License or Government Control	1.00
Advocates Dispensary System.....	.25
Undecided or Noncommittal	2.75

The New York Times' Errors in Advocating the Reappointment of Gov. Harding of the Federal Reserve Board.

THE New York Times, which as a newspaper for gathering world news, is a great institution, but which as an editorial advisor for the country is a very unsafe guide, commenting on the report that Governor Harding would not be reappointed as Governor of the Federal Reserve Board, recently said:—

"There has been no contradiction of the semi-official announcement in Washington that the President does not intend to reappoint Governor Harding of the Federal Reserve Board. His term of office is soon to expire. No one has questioned the ability, integrity and public spirit with which he has discharged his duties. But it is said that he is a Democrat and from the South; and, besides, it is intimated that the President has another man in mind for the position. However great a new appointee's merits might be, it would be a big mistake to displace Governor Harding so long as he is willing to continue at the head of the Federal Reserve Board. His forced retirement would give a shock to the financial community. It would imply that the dangers foreseen by some at the time of the creation of the Federal Reserve Bank were in process of realization.

"Two things were chiefly feared. One was the intrusion of politics into an institution from which, above all, it is important jealously to banish partisan motives. The other apprehension was that sectional influences might be allowed undue weight, and that continuity in administration of the affairs of the Federal Bank might be broken off. If Governor Harding is now to be displaced, it will be taken throughout the South partly as a discrimination against that part of the country and partly as a response to the wild attacks upon the Federal Reserve Board made by Senator Heflin of Alabama. He was conclusively answered at every point by the speech of Senator Glass of Virginia, but apparently the significance of this controversy between ignorance and knowledge has not penetrated the White House.

"Aside from all questions of politics or locality, Governor Harding should be kept where he is in recognition of his great services. The skill and grasp which he has displayed in a period so critical to our public finance have won him high and deserved praise from all competent to pronounce upon his work. Any private institution having such a man at command would think it madness to dispense with him in order to make room for an untried substitute. We are not yet out of the woods, financially speaking, and in the months to come the country will desire to be assured that the Federal Reserve Board is to continue to be managed with prudence and sound ideas. If Governor Harding is willing to stay, the Administration would be guilty of an act of folly if it compelled him to go."

We believe that every statement in this editorial is diametrically opposed to the truth, except the one that suggests that Governor Harding will not be reappointed. That he will not be reappointed we think is quite certain, and for that the country may well take courage and thank God.

The Times deliberately mis-states the facts when it says—"No one has questioned the ability, integrity and public spirit with which Governor Harding has discharged his duties". Millions have questioned his ability, and millions have protested against his mismanagement of our financial system. The fact that he once claimed to be a Democrat and that he is from the South will certainly not have any weight whatever in the refusal of President Harding to reappoint him. It has been charged repeatedly, and we believe, never denied, that Governor Harding has been more intimately identified with Republican politics than with Democratic politics. Instead of his forced retirement being a shock to the financial community, it would be an occasion for singing the Long-meter Doxology on the part of the people of this whole country, with the exception, perhaps, of the few big financial interests who have been favoring his reappointment, but the country at large recognizes that his reappointment would spell disaster to our business interests even though he has been overruled so completely by the influence of the administration and Comptroller Crissinger and Secretary Mellon, that the policies that once ruled in the Federal Reserve Board no longer rule there.

The Times says that if Governor Harding is displaced it will be taken throughout the South as a discrimination against that part of the country. Never was there a greater error stated in print, for on the contrary it will be taken by millions of people in the South as a sign of better times and a proof that the financial forces which have kept him in power are no longer to dominate this country. Senator Heflin's speech has not been answered by Senator Glass. Senator Glass made some glaring mistakes which Senator Heflin pointed out with great clearness, and Senator Glass has not replied to Senator Heflin's charges.

The other statements made by the Times are about as absurd as those to which we have called specific attention. False from beginning to end; false in every assertion made as to the desirability of retaining Governor Harding, is the Times editorial. New York papers were enthusiastic advocates for the appointment by President Wilson of Paul Warburg as a member of the Federal Reserve Board, as though this country was so lacking in financial ability that it must turn in the formative period of its new financial system to a German banker who had only recently been naturalized; a German whose family for a hundred years have been identified most intimately with the financial operations of the German government. The propaganda carried on by the New York papers in favor of Mr. Warburg is on a par with that which the Times is now carrying on in behalf of Governor Harding. But the country, and we hope, the administration, has long ago reached its own conclusions, which are directly contrary to the views of the New York Times on this matter. The views of millions of people in all sections are voiced in a letter from the wife of a leading Southern business man who sends the Times' editorial to the MANUFACTURERS RECORD and writes as follows:

"I am a devoted admirer of your paper—chiefly perhaps because it is so fearless. You express your opinions absolutely honestly no matter whom they knock—and it seems to me that your opinions are fair and unprejudiced.

"I know your opinion of Governor Harding as president of the Federal Reserve Board and I know that many of the finest men of the South agree with you. It seems a pity that this leading editorial of the New York Times should express so contrary an opinion. Surely the North and the South have the same financial interests.

"Even if President Harding have the wisdom of the serpent he cannot possibly please everyone. But to represent that he bases his decision on sectional influences seems unworthy of the New York Times. Cannot you do something about it?"

The "something" that the MANUFACTURERS RECORD would do about it is to have every man and woman in this country who has suffered from the unnecessary drastic deflation policy of the Federal Reserve Board to write direct to President Harding and protest against the reappointment of Governor Harding and let this be done at once.

EUROPEAN COTTON MANUFACTURERS CONTINUE THEIR CENTURY LONG HUNT FOR NEW SOURCES OF COTTON SUPPLY.

IN calling attention to the great possibilities which Brazil offers as a source of cotton supplies in the future, the International Cotton Federation, Manchester, England, states:

"The latest statistics of the cotton consumption of the world indicate that probably not less than 13,000,000 bales of American cotton will be used during the current season, while the crop of the United States in 1921 was only 8,000,000 bales, of which the American cotton mills alone will consume about 5,750,000 bales. These figures show the imperative need of organized work in exploring all possible new fields of supply. Because of the ravages of the boll-weevil it is no exaggerated statement to say that in the near future the United States will only be able to produce as much cotton as the American mills will be able to consume."

PROTECTIVE TARIFF SENTIMENT AS EXPRESSED BY SOUTHERN FREE TRADE PAPERS.

BELIEVING absolutely in the value of a protective tariff for the country at large, the MANUFACTURERS RECORD has for forty years been advocating protection for protection's sake. At the same time, it has always recognized that the South was being stabbed in the house of its own friends by its fight against a protective tariff even when a protective tariff was absolutely certain for other sections.

The Democratic politicians have been perfectly willing in times past to fight against protection for the South's raw materials, even when they knew this was putting a club in the hands of the Northern and Western manufacturers to beat down the South with free raw materials produced by the South. The East and West always very properly demanded a protective tariff on the finished product. They have been unwise, however, in that, while demanding a protective tariff for their own products, they have often sought free trade on their raw materials and the South has thus been made to suffer whether Democrats or Republicans were in power.

Recently the MANUFACTURERS RECORD called upon the politicians of the South to recognize the fact that a protective tariff bill will be passed by Congress and that if they continued the policy of fighting all protection it would simply mean that the South would again be slaughtered while the rest of the country would have the benefit of protection. We are glad to see that two of the leading papers of the South, following that line of thought, are urging upon the Democrats in Congress that as a tariff bill is going to be passed they do their utmost to see that the South gets its share of a protective tariff.

On this point the views expressed by the Atlanta Constitution and the Fort Worth, Texas, Star and Telegram are indicative of an awakening of sentiment on the part of Southern newspapers that this section shall no longer be sacrificed merely for a free trade fetish of the past. We commend to the politicians and to the people of the South the following articles from these two leading papers:

Tariff and the South.

[Atlanta Constitution.]

In view of the obvious certainty that a high tariff bill will be passed by the republican congress and put into operation either before or soon after the 1922 elections, despite all that the democrats might be able to do to prevent it, let us hope that the application of its "protection" will be general to the industries of the whole country, and that it will not be in effect a sectional measure.

As The Fort Worth-Star-Telegram truthfully said in a recent editorial, which we reproduce elsewhere upon this page, "the big fact that faces us, and which can not be dodged, is that the present congress is going to pass a protective tariff bill;" and the Texas newspaper takes the very logical position that if, in their zeal to promote the theory of free trade, the democratic minority oppose the measure to the extent of excluding strictly southern products and southern industries from its protective influence the south will suffer materially and no possible good result will have been attained.

"Democratic representatives in congress," says The Star-Telegram, "who come back home and tell their constituents that they 'kept the faith of the fathers' and voted against that bill will give little consolation to the producers of the south if the bill is a one-sided and sectional measure, giving the east a big advantage and placing the south at a decided disadvantage."

From the standpoint of the democratic south and southern welfare, this is expressive of an altogether reasonable and

common-sense attitude toward the pending tariff bill.

Our Texas contemporary goes on to say that while the democratic members of the house and senate may be, and doubtless are, "powerless to prevent" the enactment of the tariff bill, "they are not powerless to obtain protection for the products of Texas and the south" on a parity with the measure of protection to be thrown around the products of the north, east and west, and that "if the bill is a one-sided affair the democratic members who 'keep their records straight' will be directly responsible for it."

The point of the whole matter, from the standpoint of southern prosperity and common-sense, is that while the democratic south is traditionally opposed to the principle of so-called "protection," there is nothing to be gained by stubborn opposition to a tariff bill the enactment of which, in one form or another, is a foregone conclusion and a certainty.

On the other hand, much may be gained in the way of an equitable distribution of the promised "protection" by yielding to the inevitable and making the best of it.

That is to say, so long as enactment of an undemocratic high protective tariff bill apparently is inevitable the industries of the south should be placed on an even footing with those of the rest of the country in the enjoyment of the protection for which it provides.

If the bill is going to pass anyhow, why should the south be discriminated against and deprived of whatever special benefits the industries of the country may derive from it?

Why should southern industries be made to suffer discrimination simply because southern congressmen and senators are desirous of keeping their records straight?

Winfield Scott Hancock, democratic nominee for the presidency in 1880, said in one of the campaign speeches that the tariff was a "local issue," or words to that effect.

That statement was ridiculed from coast to coast; but General Hancock was right—the tariff is "local," according to the particular products and industries of a given locality.

And in the same way and to a proportionately greater extent it may be made sectional.

It is to be hoped, therefore, that our representatives in congress will not let their opposition to the protective tariff principle drive them to such an extreme as to alienate the south from the provisions of the bill that is to be enacted by the republican majority despite democratic opposition to it in principle.

The Real Tariff Question.

[From The Fort Worth, Texas, Star-Telegram.]

The question which is being raised by the Southern Tariff conference is an economic question and not in any sense a political or partisan one. It is not even a question of protection or free trade. It does not foreshadow a shift in Texas to the republican column, it does not even mean a growth of "protection sentiment" in Texas or in the south. It is simply the very practical question of whether the products of other sections of the country are to receive the benefits of a protective tariff and the products of Texas and the south be placed at a decided disadvantage by being denied such protection.

The big fact that faces us and which can not be dodged, is that the present congress is going to pass a protective tariff bill. Democratic representatives in congress who come back home and tell their constituents that they "kept the faith of the fathers" and voted against that bill will give little consolation to the producers of the south and of Texas if the bill is a one-sided and sectional measure, giving the east a big advantage and placing Texas and the south at a decided disadvantage. The bill is going to be passed. The democratic members who are going to vote against it will admit that right now. They will say that they are "powerless to prevent it." But they are not powerless to obtain protection for the products of Texas and the south. If the bill is a one-sided affair the democratic members who "keep their records straight" will be directly responsible for it.

No academic discussion of the question of protection or free trade fits this situation. No partisan denunciation of the measure as a republic measure fits it. If the partisan interests of the democratic party require that democrats shall have nothing to do with the measure, which we do not admit by any means, then the question which is before the democrats in congress is simply whether they are willing to sacrifice the interests of the producers of the south on the altar of fancied party advantage. That kind of party advantage, even if it could be gained, would benefit nobody but officeholders and politicians, for it is related alone to political campaign and the holding of office and not at all to the economic interests of the south.

The politicians are in control of the party machinery and apparently the representatives in congress are obeying the

party whip without reference to the interest of their constituents. However, the right of petition has not been abolished, and it is to that the Southern Tariff conference has decided to appeal. It has made little headway with the politicians. It is now turning to the people. If you believe that everything should be done to prevent the new tariff law from being a sectional and one-sided affair, if you believe that everything should be done to protect Texas and the south from the consequences of such a measure, then tell it to your congressman. The bill is going to be passed. It is going to be passed and enforced by your government, which is none the less your government because it is controlled by republicans. The question is what kind of a bill do you want it to be. It is up to you.

WHEREFORE WAS HE CHOSEN?

Born in Germany, the son of one of that country's important bankers, Paul M. Warburg received the best bank training Europe afforded. Study and practical experience not only in Germany but also in the banking firm of Warburg & Warburg in Hamburg—a firm founded by his family nearly 100 years before. New York rather than Hamburg, however, became the scene of his financial operations and it was as a member of Kuhn, Loeb & Co., international bankers of that city, that he distinguished himself as a financier.

Few people perhaps realize what an important factor Mr. Warburg was in bringing about banking reform in the United States. His early advocacy of a central bank plan did much to pave the way for the present Federal Reserve Banking Reserve Board from 1914 to 1918, giving up a very lucrative System. Mr. Warburg served as a member of the Federal position to accept what he considered a public duty.—*Christian Science Monitor*.

The facts given in the foregoing in regard to Mr. Warburg by the *Christian Science Monitor* as to his birth place and his financial training for membership in the great banking house of Warburg Brothers, merely serve to emphasize the question which the *MANUFACTURERS RECORD* has often raised as to why it was necessary just prior to the European War for Mr. Warburg, by the power of a tremendous propaganda in his behalf, to be made a member of the Federal Reserve Board, and the Vice Governor for several years. If it was a scheme of Emperor William to put into the control of our financial operations a man long identified with German international banking operations we might be able to understand why the appointment was brought about.

But what was the influence that caused President Wilson to make such an appointment, and were there no American-born bankers who could organize and put into operation the Federal Reserve System? Did we have to turn to a German-born banker as though there, and there alone, we could find the greatest financial genius?

HIGH FREIGHT RATES ON FURNITURE.

A VIRGINIA furniture manufacturing company in the course of a letter discussing the high freight rates which are burdening that particular industry and the buyers of furniture, says:

"We agree with nearly all your editorials regarding the economic conditions of the country, and especially do we agree with your views regarding the Reserve Banks, railroad freight rates, etc.

"We are mailing today three checks in payment of invoices for lumber, in the amounts of \$507.48, \$607.48 and \$111.44, on which the freight charges were \$196, \$253.60 and \$236.34, respectively. I do not believe the nation can afford such freight rates, and although we agree with you that business is improving, owing to the fact that interest has been reduced, and in some instances freight rates have been reduced, we believe that the revival of business depends largely on the prosperity of the farmer, the producer of lumber, and on the building of homes. Activity in all three of these cannot reach a satisfactory condition until the freight rates are materially reduced.

"I believe that every one is willing and anxious to see fair play, and to give the railroads all they are entitled to, but the agricultural interest and the great consuming public must also receive fair treatment.

"When the freight rates are considered from the stand-

point of the furniture manufacturer, it seems almost impossible for the consuming public to become buyers to any extent as long as the freight rates are so high. The illustration in the second paragraph above is only one item entering into the manufacture of furniture, and when it is remembered that lumber is only about 20 per cent of the production cost of the finished article, one can realize the amount of freight which the consumer must pay. There are at least a hundred other items entering into the construction of furniture, and by the time a suite of bed-room furniture reaches the consumer, more than half of the cost is freight."

A NATIONAL BANKER'S ADVICE.

THE view of the president of a national bank in regard to the business outlook and the methods which should be pursued, are expressed in a letter from Mr. H. E. Lyford, president of the First National Bank of Waverly, N. Y., to the editor of *Commerce and Finance*. Mr. Lyford sends to the *MANUFACTURERS RECORD* a copy of his letter in the hope that this paper may find it available for publication. As addressed to Mr. Theodore Price, Editor of *Commerce and Finance*, the letter is as follows:

"Noting that you are advising caution on the part of our business men, seeming to fear expansion, as do many others, the question arises as to whether inaction is advisable now.

"A basis for the question is one result of expansion in 1919, which was the lowest percentage of business failures ever known in this country—29/100ths of 1 per cent. Then followed the drastic contraction of loans of 1920-21; \$8,000,000,000 from October 1920 to October 1921 (some shrinkage), which was weathered, with an increase of percentage of failures to over 90/100 of 1 per cent. Doesn't the record last forty years, why fear disaster as a result of activity on their part? Is it fair to them or good for us? Why not advocate constructive expansion so strongly that we will get the idea firmly fixed in our minds, then action may follow.

"Another question—Is the Federal Reserve Bank hoping to accumulate 100 per cent reserve? What would the directors and stockholders of an ordinary bank say to its officers if they carried 77 per cent reserve as the Federal Reserve Bank does, or 87 per cent as the Federal Reserve Bank of New York does?

"Would you call this action caution? Isn't their action causing a vast economic loss to the country?

"Suppose the other banks in this country should follow their example, could we have any growth at all? Is their action wise or otherwise?

"Don't you really believe constructive expansion will make a better text for you and us than caution."

HOW CLEARING HOUSE CERTIFICATES ONCE SAVED BIRMINGHAM.

SOME years ago when Birmingham had emerged from a period of extreme depression in iron and every other industry, a dinner attended by many leading men of the community was given to celebrate a large investment that was then being made in an iron enterprise. There was a good deal of pleasant, after dinner talk about the prosperity which Birmingham was then enjoying as compared with the depression through which it had passed while iron was selling at \$6.50 to \$7.00 and \$8.00 a ton, with the furnaces really losing money on every ton they sold under any proper accounting system.

During the evening a Birmingham banker in reply to some raillery from another local man, said that when the banks got together to try to find a solution for the financial difficulties under which the community was laboring, they found that the notes of the preceding speaker were in every bank in town to such an extent that it was decided to use these notes and those of a similar character, good, bad and indifferent, as a basis for the issuing of clearing-house certificates, and with these certificates based on the stuff that was in the banks, much of it very uncertain of payment, "the banks were able to float the town out on the sea of the abounding prosperity upon which they are now sailing."

RAILROAD OPERATION BY CONTRACT—NO NEW THING AS SHOWN BY EARLY RECORDS.

THE United States Railroad Labor Board last week decided that the letting of shop repair work by a railroad to outside firms constituted a violation of the Transportation Act, and furthermore, that any contract provisions which conflicted with the wage rates and working rules prescribed by the Labor Board were illegal.

This decision, the first of several to be made on cases of letting repair work to contractors was made in the case of the shop crafts unions and the Indiana Harbor Belt Railroad. Altogether there are seventeen railroads concerned in similar cases, among them being the Western Maryland Railway, whose shopmen are now on strike.

It was declared by the Labor Board that if one class of railroad employes could be dropped and their work let to contract "there is no sound reason why each and every railroad employee in the United States cannot be given like treatment."

Contrary to the opinion of many individuals the letting of contracts to either firms or individuals for doing railroad operating work is no new thing. Old records of the Philadelphia, Wilmington & Baltimore Railroad, which now forms the central link in the route of the Pennsylvania System between New York and Washington, show that as early as 1855 contracts were in effect and that they continued satisfactorily for several years, but passed out of existence during Civil War conditions the fiscal year 1862 being the last under which general operation and maintenance were done under contract.

It will be observed that the contracts covered "general operation and maintenance," in other words they comprised the conducting of transportation.

Samuel M. Felton, Sr., then president of the road, said in the report for 1856: "All the trains are now run at a stipulated price per mile, including repairs and renewals of locomotives, fuel, oil, and waste, and wages of enginemen and firemen. The labor on repairs of road is also furnished by contract. The freight business is paid for by the ton, in all its details, including loss and damage, and wages of conductors and brakemen. The fuel for all the stations, shops, steamboats, cars and for the ferry, is furnished for a stipulated sum per year. This system, more effectually than any other, brings to bear upon the affairs of the company the element of individual responsibility, the true element of success in any business."

In the report for 1858 Mr. Felton attributed the regularity of train movements and practical freedom from accidents to the operation of the contract system and in 1859 he said practically the same thing. In 1860 he said, "The work is better and more cheaply done and with more regularity and safety than under the old system, and we feel confident that in our case it has largely contributed to the success of the road."

Not only did the contractors run the road for the company but they built new tracks and passing tracks if they did not exceed 7 miles in length. They also paid for clerical and manual labor in the freight department, took all risk in handling freight and all loss on freight as to collections, this being in the contractors' bids for the work in 1856.

The abandonment of the contract system was caused by the tremendous rise of prices on everything during the Civil War it being "deemed more to the interest of the company to take the risk of future prices, than to pay an amount for the service by contract which would cover all the risks that the contractors would be liable to."

Yet, in 1864 a new contract covering only maintenance of the actual railroad, viz. tracks, etc., constituting the permanent way, was made but when it expired it was not renewed.

However, a contract for running trains on branch lines existed until late in 1867.

The operating ratio of the road before contracts were made was in most years 43 per cent. One year it was 40 per cent; in another 42 per cent. After contracts began to be made the operating ratio for most years was 37 per cent, but sometimes a little below and again a little above that.

The difference between then and now is strongly emphasized by the fact that in 1921 the operating ratio of the Pennsylvania Railroad System was about 86 per cent due mainly to the domination and well nigh damnation of railroads by destructive legislation taking the control of railroads away from their owners and putting it into the hands of Federal commissions and boards.

The more the Government endeavors to control railroads in their labor operations and in other ways the greater the destruction of the ability of the railroads to serve the public. Government domination of railroads is almost as bad as would be Government ownership and that would mean ruin.

Brazilian Cotton—About 700,000 Bales Produced Annually.

The official report by Mr. Arno S. Pearce, General Secretary of the International Cotton Federation, Manchester, Eng., to the members of the organization, on the journey of a small European Mission which visited the cotton states of Brazil in 1921 is in book form. A free distribution of this record has been made among the 3000 members of the Federation in all parts of the world, but a limited supply is offered for sale.

The volume deals with the cotton potentialities of Brazil as a whole and gives a detailed account of the experiences gathered on the journey of the Mission through the States of São Paulo, Minas Geraes, Bahia, Alagoas, Sergipe Pernambuco, Parahyba and Rio Grande do Norte.

The result of the journey shows that the North Eastern States of Brazil are already producing long staple cotton, used by a few of the Lancashire and Continental spinners, that owing to the lack of organization in plant selection and seed distribution, the quality shipped from those parts is not nearly as good as it might be, indeed, scientific tests of some of the best cottons picked in the fields by Mr. Pearce are said to show great similarity in length with the best Egyptian and West Indian cottons.

The Brazilian Government is aware of the importance of extending the cotton crop and established two years ago a special Cotton Department. In the opinion of the author, individual effort by private firms will be necessary besides the activities of the Government Department to achieve satisfactory results.

In the North-Eastern States the cotton plant is perennial, while the bulk of the Brazilian cotton grown in the remaining States is the annual "Upland American" kind, of about one inch staple.

The total Brazilian crop is at present estimated at about 700,000 bales of 500 lbs. (equivalent) but the available area is of much larger extent than the whole Cotton Belt of the United States of America.

Mr. Pearce gives full particulars of the Cotton Spinning and Weaving Industry, a list of the mills, their machinery, particulars of wages, welfare work, etc. The imports of cotton goods are also dealt with.

A special chapter gives much useful information with regard to the methods of handling cotton for export, with particulars of the firms engaged in this trade and their methods of classing and baling cotton.

The chief products of the country, other than cotton, are also dealt with in the text, with illustrations and statistics.

Uniting All Branches of the Construction Industry.

SECRETARY HOOVER TO PRESIDE AT FORMAL ORGANIZING MEETING—FRANKLIN D. ROOSEVELT WILL ACCEPT PRESIDENCY OF NEW NATIONAL COUNCIL.

By E. J. RUSSELL of the Executive Committee, American Institute of Architects, and N. F. HOGGSON, of the Executive Board, Associated General Contractors of America.

For the first time in the history of American industrial development a great industry has united all its elements—manufacturers, labor, and the professional branches—in a great effort to raise the standards and efficiency of the industry and improve the service which it renders the public. The American Construction Council, on which the organization details are now being completed, dips down into the construction industry and brings together for conference, for betterment of understanding and for common action the architects, the engineers, labor contractors, materials manufacturers and dealers, bankers and insurance men—all elements concerned with building work of any description and with the construction of public works, railroads, bridges, irrigation works, etc.

It is stipulated that all the work of the Council must square with the public welfare and so dominant has this idea been in the preliminary conferences that Secretary of Commerce Hoover, seeing the benefits that will result, has taken the responsibility of presiding at the formal organizing meeting in Washington, on June 19 and 20, and Franklin D. Roosevelt, of New York, former Assistant Secretary of the Navy, has agreed to accept the presidency of the organization.

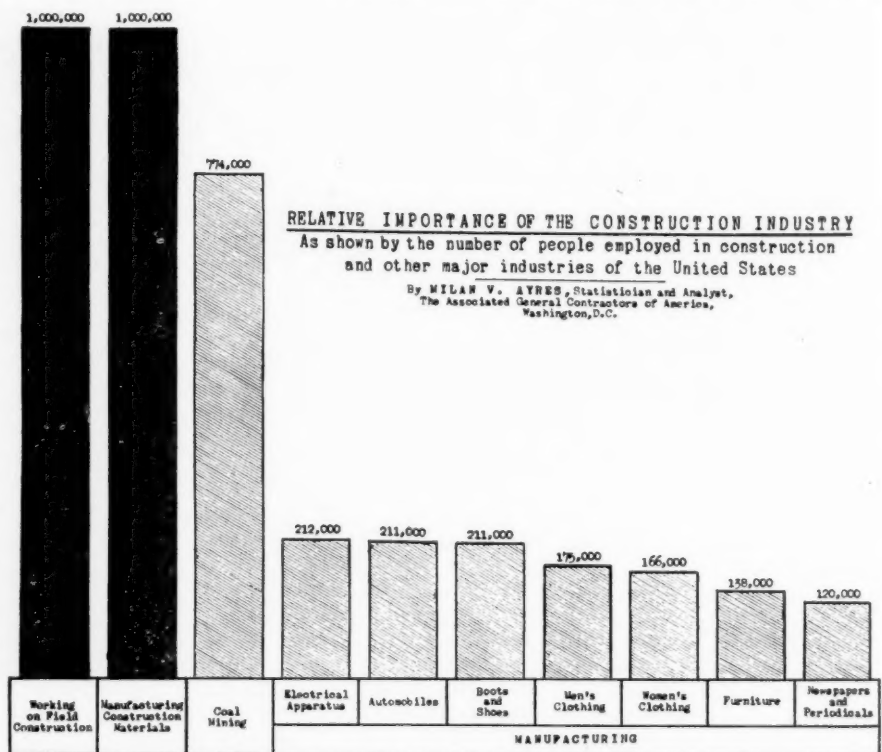
The possibilities of the new organization are tremendous. Instead of thinking of the building of houses as the individual expression of the fancy of the individual citizens, of the building of highways and railroads as merely the means of an industry we call transportation, of factory building and hydro-electric construction as isolated enterprises embarked in by isolated groups of individuals for private gain, we must think of construction as we do of agriculture, or of mining, or of manufacturing—as one of the great creators of permanent wealth, as one of the foundation stones in our civilization on which our progress is built.

Already indications of this are evident. Construction reports have become equal to crop reports as barometric indicators of the material prosperity of the country. On their rise and fall depend the well-being of millions of our people, the success of great enterprises, the future welfare of our citizens.

When considered from the standpoint of the yearly volume and money involved, the construction industry comes second only to agriculture and is among the first of all industries when expressed in terms of the labor. Investigation has

shown that the number of workers, who together with their families depend upon the construction industry for a livelihood totals approximately 11,000,000 persons. It was conservatively estimated that 24 per cent of our annual capital accumulation and over 50 per cent of our national savings are absorbed by this great industry every normal year. Approximately nine-tenths of all iron, copper and zinc and 95 per cent of all the lead produced in this country are consumed in construction.

During the war it was necessary to postpone all but essential construction, leaving us at the close of 1919 with an enormous deferred volume of construction work. In 1920 we began to catch up, to fall back again in 1921; today we have a deferred total valued by students of the industry at \$10,-



000,000,000. Of the housing shortage, an important part of this deferred construction, the general public is well aware. Yet the shortage exists in every line of construction. We have not enough office buildings or schools, railroads or highways, while sewerage, water-supply systems and paving are far behind present needs. This shortage has put great pressure on every branch of the industry and has forced it to study anew its relationship to the whole. Moreover, the public has lacked confidence in the fairness of building costs and this has added to the pressure put upon the industry. Not only has each of the elements been re-examining its position and responsibility but efforts at co-ordinated work have been made.

Nearly every one of the 250 national associations in the industry has tested out its own work and learned from experience the large amount of duplicate effort and its in-

ability to grapple effectively with the problems that extend beyond its special field. They are ready and eager to have these common problems taken over by an all-embracing organization so that there may be the elimination of duplication and more resultful work. They appreciate that the public demand will no longer wait and that only through a broad, virile and effective movement, dedicated to the improvement of the service which construction renders the community, states and nation can the industry gain public confidence. Through co-ordinated action there is opportunity for tremendous waste elimination, assuring to the public more and better homes, public buildings, railroads, bridges, etc., for their construction expenditure.

While the organizers have a large program of work mapped out, efforts will be concentrated at the start on a few of the more outstanding problems. Chief among these is the establishment of a code of ethics that will be universally accepted in the industry. Due to a small minority the whole business of construction is, as Mr. Hoover expressed it recently in addressing the industry, "under a great cloud and the moral ethics of the business are challenged daily throughout the entire country." Mr. Hoover added these significant words:

"I am convinced that these things can never be cured by legislation or by jails. They can be cured by the resolute action of the vast majority of honest men who form the professions, and it has now become vital in the country's interests that this should be undertaken."

The organizers consider this message from Mr. Hoover a charter for their work. It is in this spirit that the ethical work will be undertaken in order that the industry may stand square with the public and that all practices inimical to the public welfare may be eliminated.

In its organization the cardinal feature of the Council lies in giving each group equal voting power. The ten groups agreed upon are: Architects, engineers, construction labor, general contractors, sub-contractors, materials and equipment manufacturers, materials and equipment dealers; bond, insurance and real estate interests; construction departments of public utilities, and the construction departments of federal, state and municipal governments. Some of the associations engaged in the organization work have been the American Institute of Architects, the Federated American Engineering Societies, the Building Trades Department of the American Federation of Labor, the Associated General Contractors, the National Federation of Construction Industries, the National Building Congress, the National Association of Building Exchanges, the Building Trades Employers Association, the National Real Estate Board, besides a large number of associations of manufacturers.

Western Maryland to Erect Locomotive Repair Shop.

Maxwell C. Byers, president of the Western Maryland Railway Co. announced last week that contract had been awarded the M. A. Long Co., Baltimore, for erection of a modern concrete-steel locomotive repair shop at its Port Covington terminal. The shops are to be ready for operation within 90 days and work has already started. The shop will be equipped with electrically driven machinery, including overhead cranes, electric welding devices and all the most modern type equipment for heavy machine work. Part of the equipment will be moved from the Hagerstown shops, and the remainder purchased. The main building will be 100 by 300 feet, with concrete foundations, structural steel frame, suitable for supporting heavy duty electric cranes, and sides of steel sash and glass, after plans by the railway's engineers.

This new shop will give work to a large force of men, and is in addition to the big improvements to the grain elevator at Port Covington being made at a cost of something like \$1,000,000.

BETHLEHEM GETS LACKAWANNA STEEL.

Big Surprise Sprung in Financial and Industrial World
—\$365,000,000 Capitalization.

President Eugene G. Grace, of the Bethlehem Steel Corporation, announced in New York last Thursday, that an agreement had been reached for the acquisition of the Lackawanna Steel Company by the Bethlehem interests, subject to ratification, by the respective boards of directors of the two organizations. Mr. Grace, for the Bethlehem Corporation, Moses Taylor, chairman of the Lackawanna Company, and a special committee appointed to deal with the matter, conducted the negotiations that resulted in the agreement. The directors meet this week to confirm the deal which represents a combined capitalization of stock and bonds aggregating approximately \$365,000,000 and a productive capacity of something more than 5,000,000 tons of steel ingots annually, the Bethlehem capacity being now 3,217,000 tons and the Lackawanna 1,840,000 tons.

The announcement of the merger was a real surprise to financial and industrial interests. Attention had been centered on the plan for a merger of seven steel companies, including the Lackawanna, and the party of inspection had just completed a trip around the several properties to be consolidated, when the official announcement was made that one of them would drop out of the proposition. Thomas L. Chadbourne, of New York, head of the seven company plan, stated after the announcement that the withdrawal of the Lackawanna had been recognized as possible, for its representatives had notified the other six companies that negotiations with the Bethlehem people were in progress. He also said that his plans would be continued on a six company basis. The combined capacity of the six companies is about 8,200,000 tons of ingots annually.

In connection with the announcement President Grace said that his company is not playing any part in the other merger; it does not contemplate acquiring any western property. The Lackawanna has eastern plants and is therefore a proper addition to the Bethlehem organization.

"Several months ago," he is quoted as saying, "there were negotiations between Bethlehem and Midvale, and one of the important considerations in dropping the plan to buy the inland properties was the uneconomic feature of their location in the west."

The Lackawanna plants will give to the Bethlehem Corporation equipment and capacity to produce all commercial lines of steel products excepting pipe and wire and they also provide for future production of ordinary commercial bars.

It is now reported that the Bethlehem crowd are considering acquisition of the Wickwire-Spencer Steel Corporation, Worcester, Mass. It manufactures certain fine grades of steel wire, etc., which would round out the production of the Bethlehem and the Lackawanna companies.

A report from Pittsburgh intimates that Charles M. Schwab will acquire another company out of the proposed six company merger before that consolidation is accomplished.

\$1,250,000 Apartment Contract Let in Baltimore.

The Consolidated Engineering Co. has been awarded the contract for erection of a \$1,250,000 eight story apartment house at Charles and Thirty-First Street, in the Wyman Park section of Baltimore, for John P. Christian, and Adam Brandau, after plans by J. E. Moxley, Jr. The structure will be fireproof of terra cotta trim and tapestry brick, occupying a site 129 by 152 feet. This provides for 112 apartments so arranged that units may be formed of from one and two rooms and bath to as many rooms as tenants desire. Work will begin within the next few weeks.

Augusta, Ga., the Home of the Oldest Newspaper in the South, on a Building Boom.

\$3,000,000 CONSTRUCTION WORK INCLUDING TWO BIG HOTELS UNDER WAY—AUGUSTA, TYPICAL OF THE OLD SOUTH AND THE SOUTH OF TODAY, SETS AN EXAMPLE OF ENERGY AND ENTERPRISE FOR EVERY OTHER COMMUNITY.

[At the request of the Manufacturers Record Mr. Thos. J. Hamilton, editor of the Chronicle, of Augusta, Ga., has given something of a bird's-eye-view picture of the splendid activities under way in that city.]

Augusta is one of the old, old cities of the South, as indicated in the fact that the Chronicle recently celebrated its 137th birthday, being the oldest newspaper in the South. Augusta has for many years been noted as a center of the cotton handling and cotton manufacturing industry. But Augusta is broadening out. It is building two superb hotels to take the place of two that were burned. Undaunted by fires, the city is building on a firmer foundation than ever before. In this respect it is setting an example of energy and initiative and enterprise, typical of the spirit which dominates the South. It combines the old South and the South of today, and what it is doing as shown in the following story is indicative of the work under way throughout the entire South, and which soon will bring to that section a wider sweep of prosperity than it has ever known before.—Editor Manufacturers Record.]

By THOS. J. HAMILTON, Editor, Augusta Chronicle.

On the frontispiece of a 94 page newspaper, the 137th Anniversary and Housewarming Edition of the Augusta Chronicle, published April 30th 1922, under the caption "Augusta" appears these words:

"Augusta, a city that overcomes all obstacles, a city that never says die, that is the sort of city Augusta is and that is why every Augustan is proud to acknowledge from whence he came.

"When floods periodically devastated our city we expended \$2,000,000 in flood protection, and we are now as secure from flood water as any city in the country. When fire destroyed 32 blocks of our city in 1916 we builded back more splendidly than before.

"Augusta, with undaunted courage, with a gain in population of 33-1/3 per cent from 1910 to 1920, with river navigation from this city to the sea, with 100,000 undeveloped hydro-electric power on the Savannah river which flows by us, power which beckons for development, with the best climate, the best agricultural section and the best people in the world, is it any wonder that we are proud of Augusta?

"This edition of *The Chronicle* is dedicated to commemorating the wonderful achievements of our city in the past and to depict its marvelous possibilities for the future."

The above epitomizes Augusta, the gamest city in the South or the country and the glory of the past will be eclipsed by the grandeur of future accomplishments. When I say that Augusta is the gamest city in the South or the country I know full well that I am covering a great deal of territory, but I am firm in this conviction and believe that it can be proven. Certainly with \$3,000,000 of building under way at this writing and with a record of constructing over 300 new homes in 1921 at an average cost of over \$3000, to say nothing of many public buildings, it would seem that Augusta is,

indeed, laughing at those who say that the South is down and out.

Of course, we have been hard hit, but not any harder than any other communities. The ruinous policy of deflation caught every city, every town, every hamlet in the maelstrom of business disaster, but in the face of it and when conditions even were at their worst Augusta kept on building. The building betokened a confidence in the city which was not to be shaken by any temporary world calamity in business and, with a shortage in homes due to the rapid growth in population, as material and labor came down, building went forward. It started early in 1921 and seems to gain more and more momentum.

The writer came to Augusta 16 years ago and in the capacity of a newspaper man has watched the city's development with absorbing interest. It was 14 years ago that we had what was to prove to be our last great freshet from the Savannah river which overflowed the streets of the city. In 1908 the flood waters caused enormous property damage and considerable loss of life and then Augusta began to consider in earnest measures for protection. In 1912 she had another overflow, which was not nearly so bad as the one in 1908, but which cemented the determination of the city to build a levee. With a mayor whose dynamic force and patriotic zeal knew no bounds and with an able city engineer, Augusta began to lay plans for an engineering project which was huge for a city of her size to finance. However, Thomas Barrett as mayor and the driving force behind the project, instructed Nisbet Wingfield, an able city engineer, to go forward with his plans



THE NEW BON AIR TOURIST HOTEL, AUGUSTA, GA. COST \$800,000. 300 ROOMS, EACH WITH BATH. CONTRACTOR, THE FOUNDATION COMPANY, NEW YORK. ARCHITECTS, McKIM MEAD & WHITE, NEW YORK, AND WILLIS IRWIN, AUGUSTA.



RICHMOND HOTEL, AUGUSTA. COST \$600,000. 200 ROOMS EACH WITH BATH. TO BE FINISHED JANUARY 1, 1923. G. LLOYD PREACHER & CO., ARCHITECTS. GRIFFIN CONSTRUCTION CO., CONTRACTOR, ATLANTA.

and the result was that in four years a levee 12 miles long and costing \$2,000,000 was completed. Since that time waters have arisen time and again that would have caused overflows to the extent of 5 to 6 feet on the principal business streets, but the levee has caused Augustans to forget there was such a thing as a menace from the Savannah river. Augustans all agree that the levee has paid for itself several times in increasing property values, and the get together spirit of the community in the voting of a bond issue to build the levee was the beginner of a community spirit which is becoming stronger all the time.

It was during the time of Thomas Barrett as mayor that the city of Augusta built the largest hospitals between Baltimore and New Orleans and the great University Hospitals at Augusta bring thousands of patients to Augusta from Georgia, South Carolina and other states. These hospitals cost well over \$500,000 and are located adjacent to the medical department of the University of Georgia in the heart of this city. Augusta, with her great cotton mills running full time, with her two large railroad shops, the Georgia and the Charleston & Western Carolina—her great cotton warehouses and compresses, is a city that is teeming with life and industry, but she would not be nearly so confident of the future, were she not building for the future. I would speak particularly of the gigantic building program, whose payrolls are now mounting into many thousands of dollars per week. Just to give an idea of what is being done now in the building line the following construction operations will be cited:

The Richmond Hotel, 202 rooms and baths. G. Lloyd Preacher & Company, architects, Griffin Construction Company, contractors, cost \$600,000.

The new Bon Air Hotel, tourists, 300 rooms and baths, McKim, Mead and White and Willis Irvin, architects, The Foundation Company, contractors, cost \$800,000.

Addition to Lenwood Hospital by U. S. Government. This is U. S. Veterans Hospital No. 62. There will be an addition

of 300 beds to make it a 500 bed hospital. Northeastern Construction Company, contractors, cost \$500,000.

The Y. M. C. A., Murphy & Danna, and Scroggs & Ewing architects, Northeastern Construction Company, contractors, cost \$350,000.

The National Exchange Bank, Mowbray & Uffinger, architects, the Southern Ferro Concrete Co., contractors, cost \$100,000.

The United Cigar Stores building, costing \$100,000 and being built by day labor.

There is being built a \$200,000 bridge across the Savannah river three miles below Augusta to connect the city up with a magnificent section of South Carolina. A. J. Twiggs & Sons and the Virginia Bridge & Iron Company are contractors.

Reconstructing Marion office building at a cost of \$150,000, G. Lloyd Preacher & Co., architects; W. F. Bowe, contractor. In addition to these there is several hundred thousand dollars being expended in smaller business structures and residences.

The new hotel Richmond will occupy the site of the Albion, which was burned November 26, 1921, and is being erected on land owned by the J. B. White estate and is being financed largely through G. L. Miller & Company, of Atlanta, Ga. G. Lloyd Preacher & Co., moving spirits in the new enterprise and a firm of architects with offices in a half dozen cities, have designed the new hotel so that 100 additional rooms may be added as they are needed. The new hostelry will be eight stories in height and will face 75 feet on Broad street and 200 feet along a new street to be cut through the heart of the 700 block between Broad and Ellis streets and which will be known as Albion Avenue. Inasmuch as the business blocks in Augusta are too long, a division of the 700 block of Broad will greatly add to the appearance of that section of the city.

The new Bon Air is to be ready by the next tourist season and work on it will be rushed. The Bon Air Company is

headed by Thomas Barrett, of levee fame and a leading citizen for many years. The raising of some \$300,000 with which to rebuild the Bon Air in the face of the business conditions that prevailed generally speaks volumes for the gameness and community spirit of the "gamest city", such as we have dubbed Augusta. Of course, a first mortgage will care for the remainder of the cost of the Bon Air and its rebuilding means that Augusta's future as a tourist center is assured.

The City of Augusta several months ago entered into a contract with J. P. Wood, this city, and northern capitalists, to electrify the power canal which runs through the city, being diverted from the Savannah river seven miles above the city and which has for many decades furnished water power to local cotton mills and other industries. Mr. Wood will build a plant along the canal at Aqueduct Falls, where there is a 36 foot fall from the canal to the river, and expend \$1,500,000 in developing hydro-electric power. He will furnish all of the present contract users with electric power instead of direct water power with the old fashioned methods and, in addition, have 8000 horse power to be sold commercially. This is expected to attract many new industries here.

It was Mr. Wood who promoted the Georgia-Carolina Power Company development several miles above the city, a development which is now furnishing 15,000 primary horse power to manufacturers. This company is owned and operated by the Augusta-Aiken Railway & Electric Corporation, who operate the local and interurban trolley cars to Aiken and furnish the city with electric lights.

Augusta has an automobile tire company which is manufacturing over 300 high class automobile tires per day, employs 150 men and has made a signal financial success. The Southern Tire & Rubber Company is a notable local institution in which Augustans take a great deal of pride. In the Hollingsworth Candy Company Augusta has a great candy manufactory which is competing with the largest and best of candy makers and which is shipping its product all over the country.

The facts about Augusta as briefly given in this article, are such as to make any citizen proud and all of us are proud. We are proud, we are thankful, that we live in such a city. That it is a game city, a never say die city is perfectly obvious; for neither fires nor floods ever caused our courage to lessen or our enthusiasm to wane. Indeed, Augusta is the city of opportunity, and we invite and urge the stranger to come into our midst where a royal welcome awaits every one. We not only have the best climate, the best people and the best opportunities for the young men, but we are accorded the honor of having the best barbecue cooks in the world and that is no mean honor in itself. If you have never attended a barbecue at far famed Carmichael's club near Augusta then you have missed the acme of excellence in food preparation and to bear out my statement in this regard I refer you to Chief Justice Taft, Dr. Nicholas Murray Butler, Tyrus Raymond Cobb, Judge K. M. Landis and a host of other celebrities whose names could easily be called if space permitted.

\$400,000 Apartment Group to Go Up at Baltimore.

Work will commence shortly upon five additional apartment buildings to complete the Lombardy-Tuscany group in the University Parkway section of Baltimore at a cost of \$400,000. The new apartments will occupy a site of about two acres, and be constructed around an architecturally treated court. They will be of Italian Renaissance design from plans by Clyde N. and Nelson Friz, architects. Contract for the work has been awarded the Price Construction Co. of Baltimore. The new buildings will be three stories high and contain six housekeeping apartments of six and seven rooms with bath each. Wide porches connecting the new unit are features of the plans which include garages in the basements. When completed the project will be operated under the co-operative ownership plan.

Lancashire Cotton Trade Wages—New Agreement Signed.

Manchester, England, April 25.

A definite settlement of the wages dispute in the Lancashire cotton industry has been arranged. The terms provide for an immediate reduction of 40 per cent on list rates, or 3/3 on present wages, and a further reduction of 10 per cent on list rates, or 9d in the £ on present wages in six months. The second alteration is to remain in force for six months, and wage rates are thus stabilized for twelve months. It may be mentioned that the original claim of the employers was for a reduction of 75 per cent on list rates, or 6/1 in the £ on current wages.

At the moment the wages of the workpeople are 145 per cent higher than the lists and 140 per cent above the rates existing at the outbreak of war in July 1914. The new wage rates, therefore, will be 105 per cent above the lists. The agreement arrived at today covers all the operatives in the Lancashire cotton industry who number about 400,000.

It is estimated that the reduction which will come into force next week will mean a saving to the masters in the cotton industry in wages of about £150,000 per week. The conference this morning consisted of representatives of the Master Cotton Spinners' Federation, the Cotton Spinners' and Manufacturers' Association, The Operative Spinners' Amalgamation, the Amalgamated Weavers' Association, and the Northern Counties Textile Trades Federation.

On the Manchester Royal Exchange this afternoon considerable satisfaction was expressed at the settlement. Although all along there has not been any anticipation of a lockout traders are relieved by the favourable turn in the negotiations. The uncertainty which has existed with regard to labor costs has recently had an adverse effect upon trade, and it is believed that now wage rates are settled for twelve months customers abroad will be more disposed to arrange contracts with Lancashire firms.

Chesapeake Steamship Company Makes Improvements.

Demonstrating its faith in the future prosperity of the country, the Chesapeake Steamship Company, of Baltimore, has added to the present equipment of its two large steamers, "City of Baltimore" and "City of Norfolk", operating between Baltimore and Norfolk, a large number of additional state rooms and bed rooms to care for increased demands. Last year the facilities of the company were taxed to their utmost, so while the vessels were out of service for annual inspection and general overhauling, 28 additional staterooms and six bathrooms were placed just back of the pilot house, and five more bedrooms were added to the main saloon deck on each ship. This increased the carrying capacity of each vessel from 450 to 525 persons. The work was done at the Sparrows Point plant of the Bethlehem Shipbuilding Co.

Running water was installed in all rooms, private bath tubs and showers were added, and electric fans and reading lamps were installed. The two ships have just been placed in operation for the season. Besides these two vessels the company has three other ships in this service. Recently there has been a marked increase in passenger and freight business, indicating returning activity in practically all lines.

Contract Awarded for \$400,000 Science Building.

Washington, D. C., May 15—[Special]—Contract has been awarded C. T. Wills, Inc., 286 Fifth Avenue, New York, for a three story building, 190 by 200 feet for the National Academy of Sciences, to be erected at a cost of \$350,000 to \$400,000. Bertram G. Goodhue, of New York City, is the architect.

Southern Industrial Problems Feature Atlanta Meeting of Mechanical Engineers.

[Special Correspondence Manufacturers Record.]

Atlanta, Ga., May 15.

The outstanding features of the Spring meeting of the American Society of Mechanical Engineers held in Atlanta last week were the number of sessions devoted to the discussion of problems and questions having primarily to do with Southern industries.

Two of these sessions were given over to textile machinery practices, one to the management of textile mills and the Southern worker, while the power division discussed largely water power developments in the South.

In addition to occupying this important part in the program the South was further benefited by the visits which many of the mechanical engineers made to Birmingham to study the South's great iron and steel center, to Muscle Shoals to inspect that great development and to Greenville, S. C. where a day was given over to visiting several of the modern cotton mills in that city.

The registration at the meeting numbered slightly over 300 and the members attending came from all sections of the country.

During the afternoons of the convention week trips were planned to the industrial sections of Atlanta and points of general interest thus giving the visitors an opportunity of studying at first hand the character and scope of industries the South is successfully operating and the modern methods that are being followed.

The favorable comments that were made by many of the engineers after their return from these inspections indicate the impressions that were made upon them. Perhaps no more important benefit comes to the South as a result of having the country's great technical societies hold some of their meetings here, than to let them actually see and study the South's resources and the underlying advantages that are offered for successful industries as witnessed by the diversified plants that have been built and are being conducted profitably and according to the latest practices.

At the business session local charters were granted to five sections, Dallas, Tex.; Chattanooga, Tenn.; Louisville, Ky.; Memphis, Tenn., and the Nebraska section including Lincoln and Omaha. Four of these five are at Southern points, which evidences the merited attention that the engineers of the South are giving to the question of becoming active factors in the national society and lending their cooperation toward the fullest study of the country's mechanical engineering problems.

This is another striking benefit which follows meetings of these societies in the South.

The first model of Eli Whitney's cotton gin, the invention of which caused the tremendous growth of the American cotton industry, was the central exhibit at the meeting. It was brought from New Haven, Conn., where it has been preserved for more than 100 years, and is now owned by the inventor's grandson, also named Eli Whitney and who resides in that city. Mr. Whitney loaned it for exhibition. This original machine contains the three essential elements of all cotton gins, viz. a revolving cylinder with teeth pointing forward, a comb through which the cotton is drawn by the teeth, and a revolving brush to clean the cotton from the teeth. "The modern cotton industry," says the Society, "may be said to date from this invention." Eli Whitney, who in 1792 graduated at Yale College, went to Georgia to become a tutor in a private family but found that the post had been filled. On the way he had met Mrs. Greene, widow of Gen. Nathaniel Greene, returning to Savannah and she

invited him to her home until he could obtain employment. Soon afterward some gentlemen from Augusta lamented to Mrs. Greene that short staple cotton was unprofitable because there was no satisfactory way to separate the cotton from the seed, but she told them that young Whitney could invent the required machine and he did so within a few weeks. The facts are briefly set forth with the exhibition of the old gin.

Most of the papers presented at the meeting were of a strictly technical character but some are of such special interest to the South because of their reference to Southern activities that a brief reference is made to these as follows:

"Cotton Ginning Machinery," by Solomon E. Gillespie, of Dallas, Tex. This was an exhaustive consideration of cotton ginning from the earliest days of the industry to the present time and it treated of the different types of cotton gins as employed for various results in the handling of the staple. In its printed form Mr. Gillespie's paper contains detailed illustrations showing how each gin operates. The entire cotton ginning process is comprehensively told.

"The Southern Worker—His History and Character." By Frank H. Neely, industrial engineer of the Fulton Bag and Cotton Mills, Atlanta, Ga. In the history of our country up to the year 1810 the manufactured products of Virginia, North Carolina, South Carolina and Georgia "were greater in value and variety than those of all the New England States," said Mr. Neely. The invention of the cotton gin and the consequence of 25 cent cotton for forty years diverted activities to cotton growing and many of the artisans moved to the Piedmont region where they became farmers or trade workers in a small way. After the Civil War and the reconstruction period these men or their descendants came eastward to work in the cotton mills of the South and are the foundation of its cotton mill industry. When trained they are most satisfactory and able workers, being orderly and stable. But the South needs training schools to teach all arts. Mr. Neely's paper was detailed and instructive.

"Management applied to Textile Plants," by George S. Harris, president of the Exposition Cotton Mills of Atlanta, Ga. "Management," said Mr. Harris, "to my idea, is more or less a matter of compromise and it is just as erroneous to uncompromisingly dictate to men without feeling their sensitiveness, as it is to attempt to twist a cotton fiber in a way it will not twist without damage." His consideration of his subject was very thorough and informing. He quoted from Elbert Hubbard "Men are valuable just in proportion as they are able and willing to work in harmony with other men." Mr. Harris commended this to employe and employer as carrying a lesson well worth while.

"Power Development in the Southeast," by Chas. G. Adsit, director and executive engineer of the Georgia Railway & Power Co. of Atlanta. Mr. Adsit gave a very full consideration to the development of hydro-electric power in this part of the country and also treated of its undeveloped water power resources with regard to the future. In their printed form his remarks are accompanied by very pertinent illustrations and diagrams which will be appreciated together with the other technical data presented. It would be impossible to give a good abridgement of his valuable paper without devoting altogether too much space to it.

"Economics of Water-Power Development." By Curtis A. Mees, of Mees & Mees, Charlotte, N. C. This was another technical paper which it is impossible to properly digest in a few lines of printed matter. Mr. Mees' study of produc-

tion, maintenance and selling costs and fixed charges was most impressive as he presented it. His discussion was extremely valuable to everyone interested in planning and running hydro-electric plants so as to avoid wastefulness and extravagance. He pointed out that there are many business hazards and sometimes enormous losses which cannot be recovered, and subsequently showed how such consequences can be escaped.

"Extraction of Oil from Vegetable Matter," by Joseph Davidson, of Davidson & Kennedy, oil mill engineers and manufacturers of Atlanta. "The vegetable oil industry in the United States," said Mr. Davidson, "has grown from practically nothing forty years ago, until today there are about 800 mills in the Southern States, producing oil from cotton seed, and about 100 mills in other parts of the country producing oil from various other oil bearing materials, such as linseed, corn germs, peanuts, soya beans and copra." He presented a drawing of a pump which he said applies pressure to the materials from which oil is to be extracted in such a manner as to produce greater efficiency in oil extraction and saving in press cloth.

"The Muscle Shoals Plant and the Nitrogen Supply," by Major J. K. Clement, of the Ordnance Department, Washington, D. C. Owing to the extensive and hearty interest which has arisen as to the possibilities of Muscle Shoals in consequence of Henry Ford's offer to take it over and develop it, Major Clement's discussion was not only timely but exceedingly valuable. The fixation of atmospheric nitrogen was considered, particularly the chief features of the three best known methods. The Muscle Shoals nitrate plant was discussed, and its general conditions outlined, including its power and raw material requirements. The various chemical processes was explained by Major Clement in some detail.

Extensive Improvement Program of Georgia Power Company to Cost \$450,000.

Columbus, Ga., May 15—[Special.]—The Georgia Power Company of this city has announced a program for expenditure of more than \$450,000 in its gas, railway and electric power departments, according to R. M. Harding, manager. This will improve the service throughout and make up for work postponed because of the war, and at the same time permit of increased facilities for future customers as the demand necessitates. By interchange with the Georgia Railway & Power Co. and possibly with the Alabama Power Co. sufficient power will be available at all times, and the plan will work to mutual advantage of the companies concerned. Distributing lines will be rearranged for future demands.

The general program includes: Miscellaneous extensions to serve new customers, \$25,000; construct 110,000 volt interconnection with Georgia Railway & Power Co. at Newnan; increase insulation on line from Goat Rock to Newnan; install neutral ground at Goat Rock and make other changes, \$102,000; construct 44,000 volt interchange line between Alabama Power Co. and Columbus Power Co., between latter's West Point substation and possibly Lafayette, Ala., \$86,000; additional equipment, new buildings and lines, \$105,000; in the retail light and power department, \$45,000; in the street railway department, \$65,000; in the gas department, \$10,000; work brought from 1921, \$68,500; total \$454,000.

\$300,000 Contract for Hydro-Electric Improvements.

Johnson City, Tenn., May 13—[Special.]—Contracts involving the expenditure of approximately \$300,000 have been awarded for improvements for the Tennessee Eastern Electric Co., of Boston and this place, on the Watauga River about five miles from Johnson City. The Carolina Engineering Construction Co., Johnson City have the general construction contract. All the machinery contracts have been

let, the Allis-Chalmers Co., Milwaukee, Wis., will furnish the turbines, and the Heine Safety Boiler Co., St. Louis, Mo., the boilers. A total of 4500 horse-power will be developed, and a transmission line five miles long will be built connecting the steam plant with Johnson City and nearby points. W. A. Leland is chief engineer for the contractors.

Mexican Chamber of Commerce of the United States is Organized.

For the purpose of promoting closer business and economic relations between Mexico and this country, the Mexican Chamber of Commerce of the United States has been organized with offices in Mexico City at 45 Bolivar St. The New York offices are in the Woolworth Building.

The directorate of the new organization is made up equally of citizens of Mexico and of the United States.

In addition to the general purpose of advancing the reciprocal business interests of the two countries and to foster friendly relations it will be the object specifically of the new organization to furnish its membership effectual and efficient service in the form of accurate information and practical assistance on the development of actual business.

S. L. Alariste, is president of the Mexican Chamber of Commerce with the following vice-presidents: James W. Gerard, Jerome S. Hess, and Russell R. Whitman. Jose Miguel Bejarano, is treasurer. Included in the directorate in addition to the foregoing officials are chairman E. H. Gary of the United States Steel Corporation, Grafton Greenough, vice-president of the Baldwin Locomotive Works, and others.

\$300,000 Additions to Pulp and Paper Mills—Other Improvements Planned Later.

West Point, Va., May 15—[Special.]—The production in both the pulp and board mills of the Chesapeake Corporation, manufacturers of kraft pulp, board and paper, will be increased by the installation of additional equipment and extensions as a result of the floating of an \$800,000 bond issue recently. Contract will be let local contractors, in addition to a large part of the work being done by the company's own forces. Plans are now being prepared. According to W. C. Gouldman, secretary, "the expenditures will amount to approximately \$300,000. Further plans are under consideration for an additional mill in the early fall which will probably cost in the neighborhood of \$600,000."

To Erect Brazil Fair Building.

A contract has been awarded to Dwight P. Robinson & Co., New York, for the construction of a building to accommodate American commercial exhibits at the Brazilian Centennial Exposition to be held in Rio de Janeiro beginning September 7th. The building, which will be the "unofficial" exhibit building, will be constructed of American materials as far as possible. It will be purely a commercial proposition, having no direct connection with the exhibition plans of the American Government under the appropriation of \$1,000,000 made by Congress recently.

Hours of Labor in Manufacturing.

The Department of Commerce calls attention to the fact that the returns of the 1919 census of manufactures indicate a general and marked decrease in the prevailing hours of labor. Of the 9,096,372 wage earners reported by that census, 4,418,693 or 48.6 per cent were employed in establishments where the prevailing hours of labor per week were 48 or under, while in the previous census, covering the year 1914, the number employed in this class of establishment was only 833,330 representing 11.8 per cent of the total number of wage-earners.

THE IRON AND STEEL SITUATION

Phenomenal Increases in Steel Activity.

Pittsburgh, May 13—[Special.]—Steel ingot production in April was at the rate of about 36,500,000 gross tons a year, against production at about 32,500,000 tons during March. The rate was approximately 20,000,000 tons during December, 30,000,000 tons at the beginning of March and 35,000,000 tons at the end of March, while since then it has been at 36,000,000 to 37,000,000 tons.

In other words, production of steel has increased despite the coal strike inaugurated April 1 and despite the fact that the union strike, which was fully expected by everybody, was supplemented by strikes in the Connellsville region, which was not expected. The Connellsville region has been strictly non-union for more than 30 years and it was not supposed there would be anything more than a few little strikes here and there in the region. Instead, about two-thirds of the whole region is on strike, and the strike has not lost strength to any extent up to this time, the end of the sixth week of the general strike. However, there has been no increase in the striking in the past two weeks or more and there is practically no chance that there will be. Production in the region has been running at about one-third the rate in March.

The steel industry has found various ways to make up for such unexpected shortages in coal and coke as have developed on account of the non-union strikes. Large quantities of Kentucky and West Virginia coal were bought early in April, and there is some buying still. The Jones & Laughlin Steel Company is reported to have just bought 200,000 tons of Pocahontas coal, to supplement previous purchases, while report has it that the Carnegie Steel Company has bought 300,000 tons of coke from the Sloss-Sheffield Steel & Iron Company, most of which will probably be moved partly by water. The Mingo furnaces that were banked early in April are resuming, presumably with some of this coke, and the resumption of the attendant steel plant will improve the supply of sheet bars, which has been a trifle scant lately.

The steel industry is making and will make no particular effort to end the strike and is fortifying itself to let the strike run as long as it wishes. The production of steel will in all probability increase somewhat in the next few weeks while July and August will probably see the usual seasonal decrease in production.

The rate of steel production since April 1, 36,000,000 to 37,000,000 tons of ingots a year, is a very high one, being 55 to 60 per cent above the rate last October and November and more than three times the rate last July, while it is only about 13 per cent under the rate in the first ten months of 1920, when there appeared to be extremely heavy pressure for steel, with very fairly prices paid for early deliveries.

The high rate of steel production and shipments has not taken the edge off the steel market, which has even increased in strength in the past week. There is not as heavy a market turnover as in March and April, mills being well sold up, at their present rate of production, into July, while most buyers are moderately well covered. There are some anxious inquirers in the market, some desiring early deliveries and willing to pay delivery premiums, while others are ready to place third and fourth quarter contracts, allowing the mills to write prices into the contracts later.

The reversal in the steel market is phenomenal, even for the steel industry accustomed as it is to see sudden changes. It is scarcely three months since steel prices were at their lowest and there was purely a buyers' market. Now there is strictly a sellers' market.

The Steel Corporation's unfilled obligations, after decreas-

ing almost continuously for 19 months, from 11,118,468 tons on July 31, 1920, to 4,141,069 tons on February 28, 1922, increased by 955,848 tons during March and April, i.e., the bookings in the two months exceeded the shipments by this amount. The shipments were about 65 per cent of capacity in March and 70 per cent in April, while the bookings exceeded the capacity, for the first time since May, 1920.

Steel Ingot Production for Two Years—April Shows Largest Total Since November 1920.

Following is the monthly production of steel ingots, from January, 1920, to April, 1922, as reported to the American Iron and Steel Institute, by 30 companies which made 84.20 per cent of the steel ingot production in 1920:

Months. 1920.	Open Hearth. Gross tons.	Bessemer. Gross tons.	All other. Gross tons.	Total. Gross tons.
January, 1920...	2,242,758	714,657	10,687	2,968,102
February	2,152,106	700,151	12,867	2,865,124
March	2,487,245	795,164	16,640	3,299,049
April	2,056,336	568,952	13,017	2,638,305
May	2,251,544	615,932	15,688	2,883,164
June	2,287,273	675,954	17,463	2,980,690
July	2,135,633	653,888	13,297	2,802,818
August	2,299,645	695,003	5,784	3,000,432
September	2,300,417	693,586	5,548	2,999,551
October	2,335,863	676,634	3,485	3,015,982
November	1,961,861	673,215	3,594	2,638,670
December	1,687,162	649,617	3,586	2,340,365
Total	26,197,843	8,112,753	121,056	34,432,252
1921.				
January, 1921 ..	1,591,281	608,276	3,629	2,203,186
February	1,295,863	450,818	2,796	1,749,477
March	1,175,591	392,983	2,404	1,570,978
April	1,000,053	211,755	2,150	1,213,958
May	1,047,810	216,497	1,543	1,265,850
June	808,286	193,644	1,476	1,003,406
July	689,489	113,312	575	803,376
August	915,334	221,116	1,621	1,138,071
September	908,381	265,152	1,207	1,174,740
October	1,269,045	345,837	1,028	1,616,810
November	1,204,371	363,912	1,718	1,669,001
December	1,129,174	296,380	1,539	1,427,093
Total	13,125,578	3,679,682	21,686	16,826,946
1922.				
January, 1922 ..	1,260,809	331,851	822	1,593,482
February	1,395,835	348,571	616	1,745,022
March	1,918,570	451,386	795	2,370,751
April	1,992,198	445,939	1,109	2,439,246

Even More Vigor in Birmingham Market.

Birmingham, Ala., May 15—[Special.]—The activity which has attracted attention for the past few weeks in the pig iron and steel markets in the Birmingham district continues with even more fervor. The quotations for pig iron have advanced to the comfortable position of \$18 per ton with \$17.50 stated as minimum and no one willing to accept any tonnage at the latter price. The make is above any output for the past eighteen months and longer and no surplus iron will be a consequence. The home consumption is showing steady activity and the indications are that through the entire summer, the balance of the year most likely, there will be warrant for not only keeping up the steady production of iron but also increasing the make.

The Sloss-Sheffield Steel & Iron Company now has two furnaces at North Birmingham making iron, three in all, including the Sheffield blast furnace, with another one, at Florence, on the Tennessee river, being made ready. The Tennessee Coal, Iron & Railroad Company is preparing two blast furnaces for the torch. Three iron-making companies are out of the market so far as second quarter delivery pig iron is concerned and are still holding off on third quarter or even later delivery. One of the smaller companies announces that though not willing to sell into third quarter, the business accepted will call for 15,000 tons of pig iron during the third quarter of the year. There has been considerable iron sold for third quarter and a little into the

fourth. Inquiries are numerous. Furnace interests during the past week told of St. Louis and Chicago agencies offering business over the telephone, the long distance messages stating the dire need for pig iron. Indications point to another advance in prices ere long, the need for the product and the ability to produce and deliver on the part of the Southern manufacturers drawing attention this way.

Steel mill operations are taking on activity every week. The Tennessee Coal, Iron & Railroad Company plants, subsidiary of the United States Steel Corporation, are working around 100 per cent capacities, according to a reliable statement. Some departments are on double turn. Orders for various steel products are numerous and there is no little amount of export business being handled.

The coal production is not as strong as it could be. A number of railroads having taken liberally on contracts which they hold to prepare against emergencies that might arise by reason of the strike in the north and middle west, have settled down to taking enough to meet needs and as a consequence the active production is not necessary. The weekly production in this state is around 285,000 with 305,000 as the normal output in good times. A little coal and coke has been shipped to South America, Cuba and other places and some coal is moving to points which heretofore got their supplies from middle west mines. The Missouri Pacific railroad bought a little coal in this territory but the amount was not great. Railroads are now preparing specifications for their next 12 months needs and between now and July a number of contracts will be made. Prices in Alabama for coal and coke have not advanced any of late.

The scrap iron and steel market is showing some improvement. Quotations show very few changes.

PIG IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$17.50 to \$18.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$18.00 to \$18.50; iron of 2.75 to 3.25 per cent silicon, \$18.50 to \$19.00; iron of 3.25 to 3.75 per cent silicon, \$19.00 to \$19.50; iron of 3.75 to 4.25 per cent silicon, \$19.50 to \$20.00; charcoal iron f. o. b. furnaces, \$32.00 to \$35.00.

OLD MATERIAL.

Old steel axles.....	\$15.50	to	\$16.50
Old iron axles.....	15.50	to	16.50
Old steel rails.....	12.50	to	13.00
Heavy melting steel.....	10.50	to	11.50
No. 1, R. R. wrought.....	11.50	to	12.50
No. 1, cast.....	15.00	to	16.00
Stove plate.....	14.00	to	15.00
Old car wheels.....	13.50	to	14.50
Old tramcar wheels.....	13.00	to	14.00
Machine shop turnings.....	6.00	to	7.00
Cast iron borings.....	6.00	to	6.50
Cast iron borings (chem.).....	13.40	to	14.00

American Steel Exports Increase.

The total volume of American exports of iron and steel for the first quarter of the year, 508,070 tons, is at the rate of slightly more than 2,000,000 tons for the year states the Department of Commerce. In 1921 the total, which comprised only those commodities listed according to quantity in the export classification obtaining at that time, was 2,171,282 tons. For the year 1920 and the pre-war year 1913 this volume was 4,702,632 and 2,652,944 tons, respectively. The close of the year may not witness an approach to the 1920 record, but keeping in mind such governing world factors as completion of liquidation of steel stocks, improved economic conditions, increased confidence, and a growing tendency toward stabilization of the exchanges, it is not unreasonable to look for this volume to reach, if not surpass, the 3,000,000-ton mark.

Exports of iron and steel from the United States in the month of March totaled 210,095 long tons, an increase over January and February of this year of 30 and 55 per cent, respectively.

The Superior Yarn Mills of Monbo, N. C., will install additional machinery and erect employees cottages, expending \$50,000.

RAILROADS

Shreveport Rate Case Orders Vacated.

The Interstate Commerce Commission has vacated its orders in the Shreveport rate case which was carried into the courts in the year 1911 and the decision finally sustained by the U. S. Supreme Court in 1914, this setting aside of the orders being an outcome of a recent decision by that court in the Wisconsin passenger rate case, following which the Texas Railroad Commission, on April 26 of this year, issued an order prescribing rates within that State in harmony with the orders of the Commission. It is stated in explanation of this action that under the present interstate commerce act provision is made for co-operation of Federal and State Commissions and that gratifying progress has been made along that line.

The Shreveport rate case was that which brought about the enunciation of the doctrine in railroad regulation that the Interstate Commerce Commission can prescribe rates to be effective within a state when it is found that the rates made by a State Railroad Commission are discriminatory against interstate commerce. The case was started by a complaint sent to Washington by the Louisiana Railroad Commission alleging that intrastate rates in Texas discriminated against Shreveport, La., to competing points.

New Equipment.

Chesapeake & Ohio Railway has ordered new equipment as follows: 3000 gondola cars of 57½ tons capacity and 1000 general service cars from the Newport News Shipbuilding & Dry Dock Co.; 1400 box cars of 40 tons capacity 100 automobile cars, and 200 stock cars of 40 tons capacity from the American Car & Foundry Co.; 38 passenger cars and 25 express cars from the Pressed Steel Car Co.

Atlantic Coast Line Railroad is in the market for 700 box cars of 40 tons capacity, and 30 all steel passenger service cars, 20 to be express cars 70 feet long and 10 regular passenger cars 74 feet long.

Missouri Pacific Railway is reported in the market for 2000 automobile cars.

Southern Pacific Railway has ordered 2000 automobile cars from the General American Car Co.

Kansas City Southern Railroad has ordered 6000 tons of rails from the Illinois Steel Co.

Part of a Georgia Railroad to Be Operated.

The southern end of the Hawkinsville & Florida Southern Railway was sold at Macon, Ga., at receiver's sale on May 9 for the upset price of \$125,000 to J. N. Pidcock, of Moultrie, Ga., Dr. T. C. Jeffords, of Sylvester, Ga., and associates who will recognize and operate that part of the line which is between Ashburn and Camilla, Ga., 51 miles. The new name will be Ashburn, Sylvester & Camilla Railroad. The other part of the road, from Ashburn to Hawkinsville, 45 miles was not sold, as there was no bid, although it is expected that an organization like that which has bought the other part of the road will be formed to buy it at the upset price of \$100,000. At the sale the road was offered first in its entirety of 96 miles but no bid was received until it was offered in sections. R. B. Pegram is receiver.

Frisco May Bid for a Gould Road.

A report from St. Louis quotes J. M. Kurn, president of the St. Louis-San Francisco Railroad Co. as saying that the report that it is negotiating to purchase the International & Great Northern Railroad is premature, because that property could not be sold until a court order is issued authorizing the sale, but his company might bid for the line when it is put up at auction.

A Big Railroad's Business Directory.

With the object of developing business the New York Central lines have issued and are distributing free to shippers a huge railroad reference book containing the names of more than 50,000 individual concerns on the system and classified as to business, locality and railroad facilities. The company says that the purpose of making this directory is to put industrial and commercial activities in more ready and intimate touch with one another for mutual benefit. The book, which is very large, has 1000 pages and includes maps especially drawn for it, one of them, 20 by 28 inches in size being in color. There are also more than 400 illustrations. Requests for copies of the book may be sent to the publicity department of the New York Central Lines, Grand Central Terminal, New York City.

Light and Railway Merger.

A charter has been filed in Maryland for the Cumberland Edison Power Co. which represents the consolidation of the Edison Electric Illuminating Co. and the Cumberland Electric Railway Co., both of Cumberland, Md., control of which was acquired several months ago by Townsend Scott & Son, bankers, of Baltimore, and associates. The new company will have an authorized capital stock of \$3,500,000 of preferred shares, par value \$100; and \$1,000,000 of common shares, the latter with no par value. The directors of the company are A. Merryman Casey, M. Walter Tinges, J. Reaney Wolfe, W. T. Henning and Chester H. Collison. The electric railway, which is nine miles long, is to be extended.

First Train Run After Many Months.

The Interstate Commerce Commission has authorized the Missouri & North Arkansas Railway Co. to issue \$3,000,000 of common stock and also one 6 per cent bond for \$5,000,000 which latter is to be given to the Government as collaterals for its loan of \$3,500,000 to rehabilitate the line.

The first scheduled train to operate over this road since July 31 of last year, when it was obliged to cease operations, was run on May 9 from Leslie, Ark., to Seligman, Mo. It is stated that it was heavily laden with freight and passengers.

Railroad Financing.

The Norfolk & Western Railroad has applied to the Interstate Commerce Commission for authority to issue \$6,700,000 of equipment trust certificates through the Virginia Holding Corporation.

The Commission has approved the application of the Central of Georgia Railway for authority to issue \$1,313,000 of 6 per cent refunding and general mortgage bonds to be pledged as security for Government advances.

B. F. Yoakum Again on Frisco Board.

Benjamin F. Yoakum of New York City, has been elected to the board of directors of the St. Louis-San Francisco Railroad Co. At the same time A. G. Becker, of Chicago, was also elected a director. Mr. Yoakum, once president of the road, had not been connected with it since its reorganization. The new members of the directorate take the places previously held by T. D. Heed and Lorenzo Semple, of New York.

A Railroad Folder About Cotton.

The agricultural department of the Chicago, Rock Island & Pacific Railway, La Salle Street Station, Chicago, Ill., have issued an interesting and valuable folder entitled "Cotton—the Great Cash Crop of the South." It is a general consideration of the cotton situation and among other suggestions presents synopsis of thought on making the crop more

profitable. Special attention is also called to Acala cotton, which it is claimed escapes considerable damage by the boll weevil, resists the effects of drought, produces a heavier yield and a longer and more uniform staple than cotton usually planted in Oklahoma, northern Texas and western Arkansas. A limited amount of Acala cotton seed is being distributed by the U. S. Department of Agriculture through Senators and Representatives. The bulletin urges diversification of agriculture among southern planters so as to supply the need of their households and farms.

Freight Loadings Continue to Gain.

The American Railway Association reports that during the week ended April 29 there were 758,286 cars loaded with revenue freight on the railroads of the United States, this being an increase of 44,198 cars as compared with the previous week. It was also 37,202 cars more than during the corresponding week of last year. Coal loadings are increasing, there being a total of 75,632 cars for the week, or 12,187 more than in the previous week. Other classes of freight also showed impressive gains in the number of cars loaded.

Decided Activity in Hardwood Market.

Memphis, Tenn., May 13—[Special.]—A very decided spurt in the volume of business was noted here in the hardwood market last week, as buyers became impressed with the curtailed production occasioned by the flood.

Prices have advanced on several items and the market has taken on a firmness that has been lacking in the past two years. There are indications of further advances shortly. Lumbermen will be largely governed on prices in the future by increased demand and diminishing supply. Extremely heavy rains over the producing regions have increased the difficulty of sawmill operations.

Automobile manufacturers are still actively in the market for hardwoods used in car construction. Prices of thick elm have advanced as a result of heavy buying. The building trades are taking large quantities of lumber for residence construction, and hardwood flooring plants are buying heavily.

A Georgia Watermelon for Every Home.

Every other large producing watermelon State in the South has increased its acreage, though none so largely as Georgia.

Georgia is growing this year 57,800 acres of watermelons, about 20,000 acres more than it grew last year. This means that Georgia will produce this season enough commercial watermelons to put one in every home in the United States, leaving enough of the non-commercial kind for home consumption.

The increase is accounted for, says Z. R. Pettet, Georgia statistician of the United States Department of Agriculture, not only by increased acreage in the old watermelon districts but by a tremendous expansion of the watermelon industry into new areas. Formerly, the bulk of the watermelons were grown in an irregular belt running from Grady and Lowndes counties, on the Florida line, to Jones and Baldwin, nearly in the center of the state, with a much smaller area in the southeast. This year, the watermelon area covers practically all of the state south and east of Atlanta. The exception is a strip of about one tier of counties along the Alabama line and a narrow strip along the coast. The most intensive increase in acreage is in the southwest district, but with the southern and eastern districts crowding it closely.

Everything considered, production will probably be decidedly larger than last year though not as much larger as the acreage would indicate. Still, the indications are that finding markets will be something of a problem.

GOOD ROADS AND STREETS

\$1,000,000 Free Bridge Across Arkansas River Now in Operation.

Fort Smith, Ark., May 13—[Special].—The free bridge across the Arkansas River linking the southeast and central south with the northwest and north central portions of this territory was opened to traffic this week. Actual construction cost more than \$1,000,000. The bridge stretches across the river from the principal business street here to Oklahoma a distance of 3168 feet. It is of reinforced concrete and steel construction, and paved with asphalt on a concrete base. Provision has been made for an interurban line. The driveway is 28 feet wide with a walk five feet wide on each side, and rails 18 inches wide and three feet high. It is a 16 span bridge finished in massive Gothic style; it towers from 50 to 150 feet high. Federal aid to the amount of \$100,000 was given the district. The new bridge is a main link in the Albert Pike Highway, which extends from Hot Springs, Ark., to Colorado Springs, Col. It is a link also in the Sequoyah, and a part of the Postal Highway and the Ozark trail.

Tennessee Lets Contracts Totaling \$380,000.

The State of Tennessee, Department of Highways, has announced the award of the following contracts, bids for which were received on May 5:

Federal Aid Proj. No. 63-B, between Davidson county line and Gallatin, 8.05 miles, of grading, hand placed base with rock asphalt surface, awarded to Moore Bros. & Carr Co., Columbia, Tenn., for \$179,694.

Contract for all bridges over 20-ft. span on Federal Aid Proj. No. 63-C awarded to Kentucky Bridge Co., Louisville, Ky., for \$23,323.

Federal Aid Proj. No. 65-A, between Cannon county line and McMinnville, placed base course with bituminous macadam penetration on surface, to J. T. Calhoun & Co., Nashville, Tenn., for \$160,307.

Contract for surface treatment of Federal Aid Proj. No. 4, Bedford County, between Shelbyville and Moore county line, to Theo. Vogelsburg, Louisville, Ky., for \$17,561.

300 Miles of Highways Under Construction.

Frankfort, Ky., May 13—[Special].—According to the monthly report of the State Highway Department there are 303 miles of highway now actually under construction in Kentucky. Of this total 238 miles are being built with Federal aid, and 65 miles with state funds alone. Contracts for surface treating 62.05 miles of additional roads were let last week.

April was a bad month in construction progress owing to the heavy rains. The greatest progress was reported on 8.9 miles of road in Union county where 15 per cent of the work was completed. Three Federal aid projects were furnished during the month and the department completed surveys on 32.7 miles of new roads.

Three Kentucky Contracts Let for Over \$200,000.

Three contracts were awarded recently for road work in Kentucky by the State Highway Commission involving the expenditure of over \$200,000. The O. P. Raymond Construction Co., of Cynthiana, received the contract for 4.5 miles in Montgomery county costing \$141,303. The Grippen Construction Co., of Knoxville, Tenn., obtained the contract for grading and draining in Meade county at \$42,180.

200 Miles Ahead of Program in North Carolina.

Raleigh, N. C., May 13—[Special].—It is stated here that the State Highway Department is 200 miles ahead of its half way mark on the 1000 mile road program for 1922. Bids for roads in the first, third, fifth, sixth, seventh, eighth and ninth districts will be opened May 25, totaling 171 miles, of which 101 miles are hard surfaced roads.

This will represent at the end of the fifth month of the year about 600 miles of contracts let, or about four-fifths of the projected work. This letting will be the largest thus far, involving approximately \$3,500,000, and bringing the total awards valuation up to about \$9,000,000.

\$300,000 in Contracts for Virginia Highways.

George P. Coleman, Virginia State Highway Commissioner, has announced the award of contracts for highways involving the expenditure of \$299,080 as follows: Between Pendleton and Louisa, 8.25 miles of road, let to the Allport Construction Co., Richmond, at \$202,165. A section of graded road, 5 miles long, in Scott county, was awarded to the Snead Construction Co. for \$61,522; a bridge in the same section was awarded to R. M. Thurmond, Lynchburg, for \$6553; and approximately 10 miles of road in Halifax county was awarded to Perkins and Barnes of Blackstone, Va., for \$28,840.

Notes on Good Roads Construction.

Edward Regenhart, Poplar Bluff, Mo., has begun construction of 25 blocks of city streets, involving the expenditure of approximately \$200,000, which represents the largest paving program ever attempted in that city.

Contracts for 20 miles of road from near the bend in the West Palm Beach Canal to Belle Glade in the Hillsboro Canal, Florida, has been awarded to T. M. Bryan, of Fort Lauderdale, who bid \$190,000.

Lumber Orders and Sales Continue High.

New Orleans, La., May 11—[Special].—Orders for lumber continue to pour into Southern Pine Association mills, according to the report from 126 mills for the week ended May 5. Sales during the week totaled, 4637 cars containing 97,910,255 feet, giving an average order per mill of 777,066 feet, compared with the high record of 827,192 feet for the preceding week and 795,488 for the week of April 21. Production increased to 74,626,063 feet giving an average of 592,270 feet per mill, compared with the preceding week's average of 581,888 feet. Shipments amounted to 3931 cars containing 83,003,065 feet, averaging 658,754 feet.

At the end of the week there were 14,237 unfilled cars on order giving the high figure of 2,385,827 feet as the average unfilled order per mill. An idea of the steadily increasing orders may be gained from a comparison with the figures for the week ended February 10 when unfilled cars totaled 10,869 and the average unfilled order per mill amounted to 1,832,600 feet.

The increase in orders on hand during the week was 5.22 per cent. Shipments were 11.23 per cent above production. Orders were 31.2 per cent above production and 17.96 per cent above shipments.

The summary report for the week is as follows:

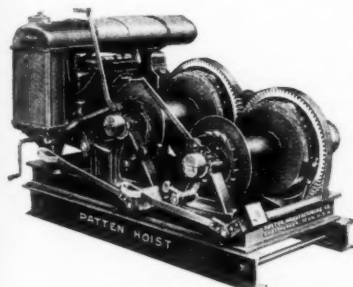
	Cars.	Feet.
Orders on hand beginning of week.....	13,531	285,707,065
Orders received during week.....	4,637	97,910,255
TOTAL	18,168	383,617,320
Shipments during week	3,931	83,003,065
Orders on hand end of week.....	14,237	300,614,255

A 1-story addition, 135x450 feet, will be erected by the Roberdel Manufacturing Co. of Rockingham, N. C. The major portion of the building will be equipped for weaving purposes and the remainder used for storage. T. C. Thompson of Charlotte, N. C., is the general building contractor and Robert & Co. of Atlanta, Ga., are the architects.

MECHANICAL

New Ideas In Hoists.

Use of the Fordson engine as a power plant for operating hoists is announced by the Patten Manufacturing Co., Chattanooga, Tenn., who have made exhaustive tests proving its

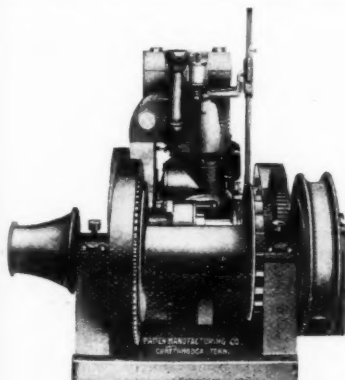


DOUBLE DRUM HOIST WITH FORDSON ENGINE.

suitability for this work. Like other truck and tractor engines it is a heavy duty type motor built for continuous service. It develops 22 horsepower and operates with either gasoline or kerosene for fuel and the company are manufacturing their standard single and double drum hoists direct connected to a Fordson engine. They have made high grade small hoists for fifteen years, the largest being of 15 horsepower and it is on this hoist that they use the motor named.

Concerning this manufacturing move they say it is essential that the horsepower of a gasoline engine shall have a generous margin of efficiency over the horsepower requirements so as to assure users of satisfactory service and that as this engine has a rating of 22 horsepower it has a generous over-capacity for a 15 horsepower hoist. However, if another engine is preferred a purchaser can have the company supply it instead.

The company are also manufacturing as part of their line the Type K combination reversible hoist (patent applied for), which has been under continuous test since August 1920, when the first one was built. As will be observed in the illustrations this hoist is equipped with winch head, drum and reversible sheave for operating double cages. Power is transferred to the hoist through a multiple clutch which runs in oil. A special feature is the automatic mid-motion stop on the operating lever, this preventing inexperienced operators from suddenly reversing the machine. Another



COMBINATION REVERSIBLE GASOLINE HOIST

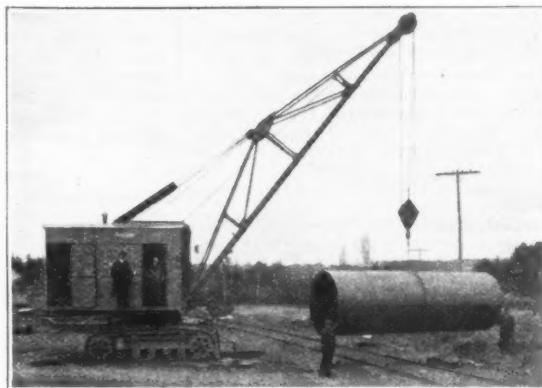
particular feature is the fact that the engine and motor are interchangeable on the same bed. This change can be made in a few minutes by an inexperienced man.

The hoist is built to the duplicate parts system, jigs and templates being used throughout and only one size is made which enables the manufacturers to standardize production. The hoist is operated by a standard electric motor or by a 5 horsepower gasoline-kerosene engine, ("New Way").

Large Improved Excavator Crane.

Demand for a larger excavator crane designed to come within standard railroad clearances without dismantling prompted the Pawling & Harnischfeger Co., Milwaukee, Wis., to manufacture and place on the market as part of their regular line a new machine known as the P. & H. 208 corduroy excavator crane, which is illustrated herewith.

This crane has been standardized by the company after having been for nearly two years at work in the United States Reclamation Service. It is of the same high grade design and construction as the other 8 and 1 cranes numbered 205 and 206 respectively, but it is of greater capacity, being able to handle a one yard Page dragline bucket on a 35 foot boom, a $\frac{3}{4}$ yard on a 40 foot boom and a $\frac{1}{2}$ yard on a 50 foot boom. It will also handle clamshell buckets of from $\frac{1}{2}$ to $1\frac{1}{2}$ yards capacity, the size depending upon reach and material to be excavated. With a few unimportant changes this new machine can be converted into a powerful



THE NEW CRANE LIFTING A HEAVY LOAD.

gasoline shovel handling a one yard dipper. It can also be used with backfilling scraper, crane hook or electric magnet.

The machine is of the full revolving type mounted on corduroy traction, is one-man-operated, and is of what is known as all steel construction. Turned shafting ground to size is used, the heavy duty shafts being made of forged alloy steel. Gears are all of steel either cast or forged, with teeth cut in the solid metal. The corduroy tractions have treads of high carbon special treated steel castings; link pins are heat treated alloy steel forgings. The corduroy tractions are self cleaning and are completely accessible for inspection and renewals. Ground bearing pressure is about 10 pounds per square inch. With independent gear drives on each corduroy a variety of motions may be accomplished to meet different moving conditions, all being controlled from the operator's platform. A seventy-five horsepower heavy duty internal combination motor, running at 500 revolutions per minute constitutes the power plant. The machine is completely enclosed by a sheet steel housing.

The Locke Cotton Mills Co. of Concord, N. C., will install a pump and motor to increase the present water supply. The pump will have a capacity of 750 gallons per minute and the motor of 75 horsepower, the estimated expenditure being \$2500.

Construction Department

EXPLANATORY.

The MANUFACTURERS' RECORD seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

DAILY BULLETIN.

The Daily Bulletin of the MANUFACTURERS' RECORD is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

Airplane, Plants, Stations, Etc.

Md., Baltimore—Air Crafts, etc.—Baltimore Propeller Co., 224 St. Paul St., incptd. by Temple N. Joyce, Robert Stewart and Paul G. Ballard; mfr. air crafts, speed boats, hydroplanes, etc.

Okla., Muskogee—Aircrafts—Muskogee Aircraft Co., Co., capital \$25,000, incptd. by Paul C. Williams, Robert T. Breiman and Q. D. Gibbs.

Bridges, Culverts and Viaducts.

Ala., Tuskegee—Government will build bridges and construct roads from city limits to site of U. S. Veterans' hospital, to be built; \$200,000 available; Jas. R. Fain, Supt. Road Construction for Treasury.

Fla., Lake Worth—Palm Beach County Comms. will build drawbridge over canal locks on Dixie Highway north of Lake Worth.

Fla., Tavares—Lake County Comms., H. R. Ferran, Chmn., let contract to McNair Lumber Co., Jacksonville, Fla., to build creosoted timber or combination creosoted timber and reinforced concrete bridge across Alexander Spring Creek section road A, East Lake County Special Road and Bridge Dist., between Altoona and Astor; Geo. E. Heller, County Engr.

Fla., Orlando—Orange County Comms. (For full detail see Mch. Wanted—Bridge Construction.)

Ga., Kingsland—Kingsland Bridge Co., let contract to Beasley Contracting Co., Savannah, Ga., at \$40,000 to build highway bridge across St. Mary's River; Basculer lift, opening 85 ft.; G. Whalen Webber, Engr., Savannah, Ga.

Ga., Moultrie—Board of Comms. Colquitt and Cook Counties, let contract to Luden Bridge Co., Atlanta, Ga., at \$15,000, to build concrete bridge across Little River; O. H. Lang, Engr.

Ga., Savannah—Chatham County Comms., will build concrete and steel bridge over Savannah River, connecting Georgia with South Carolina; voted \$250,000 bonds.

La., Lake Charles—Calcasieu Parish Police Jury, W. J. Prager, Prest., let contract to Carr Construction Co., Shreveport, La., to build 900-ft. trestle bridge across Calcasieu River on Moss Bluff Highway.

Mo., Carthage—State Highway Dept., Jefferson City, Mo., plans expending about \$20,000 to build concrete bridge across Spring River on Avilla highway.

Mo., Glasgow—Howard County will construct bridge over Missouri River; vote May 26 on \$105,000 bonds. Address County momms.

Mo., Ironton—State Highway Dept., Jefferson City, Mo., will build bridge on State road from Ironton to Potosi; three 40-ft. reinforced concrete arch spans; spandrel filled; 18-ft. roadway; four 16-ft. reinforced concrete slab spans; 2 concrete piers; 4 concrete

abutments; Iron County, Federal Aid Project No. 107, Section A; S. H. Griffith, Div. Engr., De Soto, Mo.

Mo., Macon—Noxubee County, Board of Supvrs. (For full details see Mch. Wanted—Bridge Construction.)

Mo., Neosho—State Highway Dept., Jefferson City, Mo., will build bridge over Hickory Creek, on State road from Neosho to Granby, Sta. 954 plus 68; 80-ft. pony truss span; concrete floor; 2 reinforced concrete abutments; 18-ft. roadway; Newton County, Federal Aid Project No. 182; bids opened May 11; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo. See Mch. Wanted—Bridge Construction.)

Mo., Trenton—State Highway Dept., Jefferson City, Mo., build 4 bridges. For full details (See Mch. Wanted—Bridge Construction.)

N. C., Jacksonville—State Highway Dept., Raleigh, N. C., will build bridge over New River on New Bern-Williamington Highway.

N. C., Troy—Montgomery County Highway Trustees, for full details (See Mch. Wanted—Bridge Construction.)

S. C., Columbia—State Highway Dept., let contract to Hardaway Construction Co., at \$9670, to build 400 ft. additional trestle approach to Waterlee River bridge; Richland County, Federal Aid Project No. 106.

S. C., Lexington—State Highway Dept., Columbia, S. C., will build small bridges on old State road, south of Cayce; low bidder, Campbell Constructing Co., Columbus, Ga., \$11,413.90.

Tennessee—State Highway Dept., Nashville, Tenn., let contract for following: Federal Aid Project No. 63-C, over 20-ft. span bridges from Gallatin to Davidson County line; to Kentucky Bridge Co., Louisville, Ky., at \$23,323.08.

Federal Aid Project No. 65-A, 20-ft. span over State Highway No. 1, from McMinnville to Cannon County line; to L. C. Smallwood Co., Chattanooga, Tenn., at \$17,561; D. Q. McComb, Ch. Engr.

Tex., Cuero—De Witt County, J. L. Boal, County Judge, will build concrete bridges and construct 1½ mi. gravel road in Road Dist. No. 4; cost \$20,000; J. G. Orby, County Engr.

Tex., Henrietta—Clay County Board of Supvrs. will let contracts for following: wood approach to Catalba bridge; 666-ft. steel approach on Houlika Creek; concrete abutments to bridge across Line Creek and bridge over Pheba and Cola Canal.

Tex., Canton—Van Zandt County, C. L. Hubbard, County Judge, plans building bridge over Neches River on State Highway No. 15, between Van Zandt and Smith Counties; wooden pile trestle and earth fill; cost \$13,000; Harvey E. Dean, Res. Engr.

Tex., Georgetown—Williamson County, H. H. Hodges, County Auditor, plans repairing bridge over San Gabriel River; build

cofferdam and construct new piers; R. A. Nichols, County Engr.

Tex., Goose Creek—Harris County, H. L. Washburn, County Auditor. For full detail see Mch. Wanted—Bridge Construction.

Tex., Graham—Young County Comms. Court, plans rebuilding bridge over Brazos River; 2 steel spans; construct steel pier; repair another.

Tex., Laredo—Laredo Bridge Co., increases capital from \$250,000 to \$500,000.

Tex., San Antonio—Bexar County Comms., let contract to J. L. Black, to construct 2 concrete culverts on Somerset road.

Tex., San Antonio—G. N. and S. A. R. R., A. H. Hogeland, Ch. Engr., St. Paul, Minn., let contract to Elder Construction Co., San Antonio, at \$30,000, to repair 1400-ft. New Braunfels St. viaduct.

Va., Alexandria—State Highway Comsn., Richmond, Va., will build 60-ft. low truss bridge, concrete floor, over Holme's Creek on Route No. 6; J. E. Lane & Co., Alta Vista, low bidder; G. P. Coleman, Commr.

Va., Gate City—Scott County Bd. Supvrs. (For full details see Mch. Wanted—Bridge Construction.)

W. Va., Charleston—State Road Comsn., 2 bridges. For full detail see Mch. Wanted—Bridge Construction.

W. Va., Huntington—City, C. F. Templeton, City Auditor, will build concrete bridge over Four Pole Creek at W. 5th St.; resurfaced boulevards.

Canning and Packing Plants.

Fla., Ft. Lauderdale—South Eastern Packing Co., G. B. Skipper, Prest., let contract to C. B. Turner, Bartow, Fla. for packing plant; 100x150 ft.; fireproof; install Brecht equipment; cost \$50,000.

Fla., Lake Wales—Manatee Fruit Co., will construct packing plant; 120x188 ft.; 2 story; stucco; units with capacity of 7 cars. grapefruit daily; G. A. Miller, Contr.

Clayworking Plants.

N. C., Marion—Pottery—Climchfield Pottery Works, A. W. Hilton, Mgr., will erect plant to mfr. flower pots and earthenware; ordinary construction; frame; 24x40 ft. (See Mch. Wanted—Molding Mch. and Crushed Glass.)

Coal Mines and Coke Ovens.

Ky., Bulan—New Duane Coal Co., Hazard, Ky. (lately noted incptd., capital \$100,000) organized with A. S. Petrey, Prest.-Mgr.; will develop 66.44 with probable acreage of 566.44; daily output 2 cars; install mining mch. (See Mch. Wanted—Mining Mch.)

Ky., Harlan—Kentucky Cumberland Coal Co., capital \$10,000, incptd. by W. B. G. W. and Verna Landrum.

Ky., Ligon—Elkhorn Block Coal Co., F. L. Stewart, Prest., Ashland, Ky., develop 369 acres coal lands, daily output 700 tons; increase capital to \$125,000; moving plant from Borders, Ky.; later plans building about 25 miners' houses.

Ky., Louisville—McAuliff Coal Co., capital \$30,000, incptd. by Frank B. and Tom B. McAuliff.

Ky., Morganfield—Spring Grove Coal Co., incptd. by R. E. Sheffer and T. E. Markham. Ky., Pineville—Gaddie Coal Co., capital

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

\$10,000, inceptd. by F. M. Meadows, W. H. Bullock and W. H. Gaddie.

Tenn., Cannon Creek—College Coal Mining Co., Pikeville, Tenn. organized with W. S. Elliott, Prest.; William H. Lusk, Secy.-Treas. and Mgr.; develop 2300 acres, daily output 200 tons. (Lately noted inceptd., capital \$56,000.)

W. Va., Huntington—Huntington Coal & Distillation Co., capital \$25,000, inceptd. by L. W. Blankenship, S. S. McNeer and M. L. Burnett.

Concrete and Cement Plants.

N. C., near Biltmore—Concrete Blocks, etc.—Felstone Co., 326 Haywood Bldg., Asheville, N. C., capital \$100,000, organized with C. Marshall, Prest.-Mgr.; W. Loyall Gravatt, Jr., Secy.; Blair Taylor, Treas.; will erect 54x100-ft. fireproof factory building, \$15,000; construction by owners; install concrete and woodworking machinery, \$10,000; mfr. faced concrete block, ornamental stone, roofing and floor tile. (See Mch. Wanted—Concrete Machinery; Building Materials.)

Tenn., Nashville—Portland Cement—Hermitage Portland Cement Co., John C. Vance, Prest., Chattanooga, Tenn. reported to establish \$1,500,000 cement mfg. plant at Old Hickory powder plant; remodel and install latest equipment; daily output 2000 bbls. Portland cement.

Cotton Compresses and Gins.

N. C., Marshville—Farmers Cotton Gin Co. install ginning plant.

Tex., Cibolo—Cibolo Farmers' Gin Co., capital \$20,000, inceptd. by E. Widerstein, O. Fell, Ed. C. Stoltz.

Tex., Kingsville—Farmers' Gin Co., increased capital to \$20,000.

Drainage Systems.

Fla., Bradentown—Sugar Bowl Drainage Dist., A. J. Beck, Secy. construct improvements to drainage dist.; bids until May 15; Craven & Kimmel, Civil Engrs. (See Mch. Wanted—Drainage.)

Mo., Linneus—Locust Creek Drainage Dist., E. B. Field, Secy. construct main ditch, 1st. division; bids opened May 16. (See Mch. Wanted—Drainage.)

S. C., Olanta—Burnt Brand Drainage Dist., M. D. Myers, will construct 10 mi. canal with lateral ditches, estimated cost \$20,000; reclaim 4800 acres in Florence and Clarendon Counties.

Electric Plants.

Ark., Benton—Board of Water & Light Commission, G. A. Smith, Engr. in charge, will install 210 K. V. A. unilow engine and generator 125 lbs. steam pressure, atmosphere exhaust; 2300 volts, 3 phase, 60 cycle. (See Mch. Wanted—Generator Sets.)

Ark., Little Rock—M. L. Sachs of Hopson & Sachs let contract to Arkansas Power & Light Co. to furnish electricity for sub-division.

Ark., Springdale—Springdale Light & Power Co., V. McDaniel, Mgr., contemplates extending transmission line.

Fla., Cocoa—North Shore Electric Co., capital \$10,000, inceptd. with Frank L. Brown, Prest.; N. B. Brown, V.-P.; Wm. H. Berg, Secy.

Fla., Coconut Grove—For full details see Sewer Construction.

Fla., Quincy—City, J. P. Smith, Clk., will improve electric light plant, cost \$40,000, extend water works, \$14,000, repair sewers, \$4000, construct sidewalks; votes May 16 on

\$98,000 bonds; J. B. McCrary Co., Atlanta, Ga., Engrs. (Lately noted.)

Fla., St. Petersburg—City, C. T. Baker, Consult. Engr., opened bids for electrical power plant, following were bidders; Busch; Sulzer Bros., Diesel Engine, Co., St. Louis, Mo., bids for complete plant engines, electrical equipment, alternate propositions from \$203,783 to \$225,853; Nordberg Mfg. Co., Milwaukee, Wis., engines and partial equipment, bids from \$163,300 to \$173,800; McIntosh & Seymour Corp., Auburn, N. Y., bids from \$165,970 to \$202,960; Fulton Iron Works, St. Louis, \$164,000, Ingersoll-Rand Co., Birmingham, Ala., bids from \$165,000 to \$192,500, Worthington Pump Machine Co., New York, bids from \$144,000 to \$165,000.

Fla., Winter Haven—For full details (See Sewer Construction.)

Ga., Thomasville—City let contract to Batson & Cook, West Point, Ga. to construct power plant building; C. Frank Galliher, Montgomery, Ala., Archt.

Ga., West Point—City, J. A. Avery, Mayor, will remodel and repair light plant, water works and sewerage system; vote May 24 on \$25,000 bonds.

Ky., Whitesburg—Kentucky and West Virginia Power Co., Hazard, Ky. purchased plant of Whitesburg Light Co.; extend transmission line from Dalna to city, erect substation, supply sections of Mayking, Sergeant, Thornton and Baston.

Md., Baltimore—Consolidated Gas Electric Light & Power Co. erect substation at 700-24 W. Pratt St.; 33x39 ft.; one story; brick, concrete and steel; cost \$10,000.

Mo., Bolivar—City contemplates voting on issuance of bonds for electric light plant. Address The Mayor.

Mo., Waverly—Waverly Electric Light Co., Wm. C. Bartlett, Mgr., considering installation of additional equipment.

N. C., Ayden—City will install white way. Address The Mayor.

Okla., Burbank—City, Geo. Sheef, Chrmn. will construct light plant; voted \$27,000 bonds; J. M. Buckley, Engr. (See Mch. Wanted—Electric Plant Equipment.)

Okla., Fairland—City voted \$43,500 light and water bonds. Address The Mayor.

Okla., Pawnee—City retained Benham Engineering Co., Kansas City, Mo. as consulting engineers to design improvements to electric light plant; \$65,000 available; bids for equipment and construction called for in 30 days.

S. C., Easley—City will extend light and water system; vote on \$75,000 bonds for streets, light and water. Address The Mayor.

S. C., Florence—City will probably install white way; Address The Mayor.

Tenn., Clarksville—Kentucky-Tennessee Farm Light & Power Co., inceptd. by J. H. Tate, J. B. Williams, M. M. Harrison.

Tenn., Germantown—For full details see Water Works.

Tenn., Watauga—Tennessee Eastern Electric Co., 50 State St., Boston, Mass., and Johnson City, Tenn.; W. A. Leland, Engr., for contractor; power plant at Watauga River, 5 mi. from Johnson City, steel frame, brick curtain wall, cost \$300,000, construct 5 mi. transmission line, cost \$10,000; develop 4500 H.P.; Caroline Engineering Construction Co., Johnson City, Gen. Contr.; Allis Chalmers Co., Milwaukee, Wis., contrs. for turbine, Heine Safety Boiler Co., St. Louis, Mo. for boilers. (See Mch. Wanted—Bridge Timbers and Building Materials)

Tex., Corpus Christi—Gulf Coast Power Co. will construct reinforced and concrete and structural building; cost \$50,000; Summer Solitt Co., El Paso, Tex., Contrs.

Tex., San Antonio—For full details see Water Works.

Va., Yorktown—Bureau of Yards and Docks, Washington, invites bids for erection of power house and dispensary in barracks at Government's station; brick and frame, concrete foundations; bids until May 24.

W. Va., Kingwood—West Penn Power Co., A. M. Flynn, Prest., Pittsburgh, Pa., reported to construct transmission line.

W. Va., Rivesville—City, J. W. Richards, Mayor, installing street lighting system.

Fertilizer Plants.

Fla., Bradentown—J. H. Humphries will establish fertilizer mixing plant.

Fla., Lakeland—Non-Acid Fertilizer & Chemical Co., capital \$600,000, inceptd. by H. E. Menninger, C. W. Dean, Dr. C. C. Hardin; construct 40,000 ton capacity plant; construction begun.

Flour, Feed and Meal Mills.

Fla., Tampa—H. E. Householder Co., capital \$100,000, inceptd. by R. E. Householder, W. M. Mathews, Uriah B. Gainer.

Ky., Nebo—Nebo Milling Co., capital \$15,000, inceptd. by W. M. Porter, J. W. Stevens, Amelia Porter.

Mo., St. Joseph—Grain Belt Mills Co., will improve and enlarge poultry feed dept. of plant; install mch. to mfr. meal from oats and corn; cost \$20,000.

S. C., Hartsville—Hartsville Roller Mills, J. Earle King and Karl Z. King, establish flour mill, capacity 16 bbls. daily.

Tenn., Memphis—Edwin C. Hawkins Grain Co., will construct 25,000 bus. capacity grain elevator; Kaucher, Hodges & Co., Exchange Bldg., Contr.

Tenn., Memphis—Yopp Seed Co., will erect 12,000 bu. capacity elevator; Kaucher, Hodges & Co., Exchange Bldg., Contr.

W. Va., Charleston—Jefferson Milling Co. increased capital to \$75,000.

Foundry and Machine Plants.

Ala., Birmingham—Iron Pipe—Imperial Pipe Co., increased capital to \$100,000.

Fla., Miami—Tools, etc.—Huff Mfg. Co., capital \$10,000, inceptd. with Thomas B. Norfleet, Prest.; Hugo C. Enstrom, Secy.-Treas.

Fla., Tallahassee—Brackets—Rogers Bracket Co., capital \$50,000, inceptd. with John H. Nelson, Prest.; O. B. Acker, Secy.-Treas.

Mo., Kansas City—Castings—Standard Foundry & Mfg. Co., capital \$250,000, inceptd. by J. B. Harden, W. H. Simpson and H. H. Akers; mfr. castings, tools, etc.

N. C., Elizabeth City—Harvesting Machinery—Gordon Soy Bean Harvester Co., capital \$200,000, inceptd. by G. G. Markham, C. R. Pugh and G. G. Gaither; mfr. machine for picking, harvesting and gathering grain.

W. Va., Huntington—Gas Stoves—Winner Gas Stove Co., increased capital from \$50,000 to \$150,000.

W. Va., Logan—Machine Shop—Guyan Machine Shops, increased capital to \$75,000.

Gas and Oil Enterprises.

Fla., Tampa—Tampa Gas Co., John Gribbel, Prest., let contract to American Welding Co., to construct 50,000 gal. oil tank; company will extend mains and other improvements.

Fla., Tavares—Essential Oil Co. of America, capital \$25,000, inceptd. with E. S. Burleigh, Prest.; S. C. Colley, V.-P.; B. W. Hunt, Secy.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Ky., Frankfort—Frankfort & Lincoln Oil Co., inctpd. by M. J. Stevens, Robert Rosenfeld, D. D. Smith.

Ky., Glasgow—Callahan Natural Gas Co., inctpd. by Democrat Callahan, C. T. Powell, Basil Richardson.

Ky., Lexington—Lytile Oil & Gas Co., capital \$60,000, inctpd. by H. H. Murphy, J. B. Clark, M. T. Womack.

Ky., Louisville—Consumers Distributing Co., inctpd. by Paul P. Marrin, C. B. Dye, J. Donald Love.

Ky., Louisville—Roberts Bros. Oil Co., capital \$10,000, inctpd. by G. Cliff, H. Chester and H. P. Roberts.

La., Lake Charles—Anacoco Oil & Refining Co., capital \$200,000, inctpd. by Hap Avery, B. T. Head, Lake Charles, T. R. Sutherland, Shreveport.

La., Monroe—Chamber of Commerce, C. H. McHenry, Prest., interested in organization of company to pipe gas into Monroe and adjacent territory.

Miss., Holly Springs—Mid-Valley Petroleum Co., capital \$10,000, inctpd. by R. L. Jordan, Memphis, Tenn., F. E. West and L. A. Smith.

Mo., St. Louis—Columbia Oil Co., capital \$22,000, inctpd. by Elmer J., W. C. and Edna M. Kettel.

Okla., Tulsa—Rainbow Oil Co., capital \$24,000, inctpd. by James H. Chenault, A. K. McCay, Russell E. Travis.

Okla., Wister—For full details See Mch. Wanted—Gas System.

Tenn., Morristown—People's Oil Co., capital \$15,000, inctpd. by H. H. Rice, E. B. Fisher, Geo. W. Baker.

Tex., Dallas—Refiners Production Co., capital \$10,000, inctpd. by F. W. White, Russell Reynolds, P. L. Fordyce.

Tex., Dallas—Waxahachie Production Co., capital \$10,000, inctpd. by F. W. White, Russell Reynolds, P. L. Fordyce.

Tex., Eastland—Eastland Gas & Electric Co., increased capital from \$50,000 to \$75,000.

Tex., Houston—Triad Oil Co., capital \$200,000, inctpd. by E. F. Simms, G. H. Fruter, W. L. Conover.

Tex., Laredo—Texas-Mexican Oil & Refining Co., Milno Bank Bldg., J. N. Galbraith, Prest., will construct three 400 bbl. stills with necessary accessories; 1st unit 500 bbls. per day; tanks capacity 300 to 5000 bbls. each; cost of first unit \$85,000; plant constructed under company's supervision; J. N. Galbraith, Milno Bank Bldg., Engr., contract let for machinery. (Lately noted.)

Tex., Mexia—J. L. Thompson Oil Co., capital \$1,000,000, inctpd. by J. L. Thompson, N. T. Stubbs, Ollie Jones.

Tex., Mineral Wells—Jack Dalton Oil Co., increased capital to \$1,000,000.

Tex., Waxahachie—Nortex Production Co., capital \$10,000, inctpd. by F. W. White, Russell Reynolds, P. L. Fordyce.

W. Va., Huntington—Tank—Ohio Valley Refining Co. will construct tank station on Thirty-first St.

W. Va., Salem—Randolph Oil & Gas Co., capital \$50,000, inctpd. by Ernest and Jennings Randolph, Oren F. Morrison.

Hydro-Electric Plants.

Okla., Muskogee—Royal Lee Salisbury of Royal Lee Salisbury Engineering Co., New York, reported interested in establishing hydro-electric plant on Grand River; develop 135,000 H.P., produce 350,000,000 kw. hrs., construct dam to inundate 55,000 acres.

Ice and Cold-Storage Plants.

Fla., Vero—Vero Ice Co., capital \$50,000, inctpd. with Freeman L. Knight, Prest.-Treas.; Rodden W. Knight, Secy.

Ky., Blackey—Blackey Ice Co. erect cold storage building; bids until May 24.

Ky., Frankfort—Kentucky State Reformatory, H. V. Bastin, Supt. let contract to Triumph Ice Mach. Co., Cincinnati, O. and Armstrong Cork & Insulation Co., Pittsburgh, Pa. to equip ice and cold storage plant; semi-fireproof construction; mfrs. ice for reformatory.

Miss., Lucedale—Lucedale Light & Power Co., P. P. Bailey, Mgr., contemplates installing ice plant.

S. C., Greenville—City contemplates establishing plant. Address Mayor Harvley.

Va., Richmond—Floyd Tyler, 1001 W. Cary St., repair ice plant.

W. Va., War—War Ice Mfg. Co., capital \$25,000, inctpd. by A. M. Harman, W. A. Carr and O. E. Linkins.

Iron and Steel Plants.

Ala., Birmingham—Iron and Steel—George G. Crawford, Prest., Tennessee Coal, Iron & Railroad Co., announced a new merchant mill of 10,000 tons of plain or deformed bars, round or square, per month, will be constructed at Fairfield works; to receive billets from Fairfield Blooming Mill, thus eliminate switching cars. Will consist of roughing train of 6 stand of 16-in. rolls, an intermediate mill of 5 stands of 12-in. rolls, and a finishing train of two stands of finishing rolls, provided with 11-in. pinions, making possible use of 10 or 12-in. rolls. Mechanical hot-bed 255 ft. receive hot bars from roll train; bars will be sheared and stocked in room especially adapted for storing concrete reinforcing bars, and limited tonnage of merchant bars. Bar mill and stock building to be 80x820-ft., and erected by owners. Materials for construction will be ordered at once and construction started as soon as received.

Tenn., Nashville—Reclaiming Plant—Nashville, Chattanooga & St. Louis Ry., H. McDonald, Ch. Engr., plans establishing \$30,000 plant to reclaim rails, by clipping the ends; contemplates treating several thousand tons of rails annually.

Irrigation.

Fla., West Palm Beach—Hon. William J. Conners, Buffalo, N. Y. let contract to Otis A. Hardin at \$20,000 to install drainage system on sections 4 fronting Lake Okeechobee and section 14 at Connersville; water for irrigation for section 4 will be pumped from Lake Okeechobee and for section 14 from West Palm Beach canal; irrigation systems will serve as drainage system.

Land Development.

Ala., Bessemer—City will purchase and develop park; probably vote on \$50,000 bonds. Address The Mayor.

Ala., Birmingham—City will expend \$100,000 in improvements to Green Springs Park; votes May 22 on \$750,000 bonds for park improvements; Wm. L. Harrison, Commr. Parks and Playgrounds. (Lately noted.)

Ala., Piedmont—City, O. L. Stewart, Mayor, purchase additional land and improve city cemetery.

Fla., Coconut Grove—For full details see Sewer Construction.

Fla., Jacksonville—Carmichael Development Co., Sta. G., W. H. Carmichael, Prest., lately noted inctpd. with \$250,000 capital, will develop 500 acres at Ft. Lauderdale; cost about \$250,000; opens construction bids July 1.

Fla., West Palm Beach—City will improve water front; votes June 6 on \$15,000 bonds. Address The Mayor.

Ga., Atlanta—City plans to develop 60-acre site for Candler Park. Address The Mayor.

Ga., Savannah—Clarke & Papy, capital \$10,000, inctpd. by Geo. S. Clarke and F. M. Papy.

Ga., Savannah—Wilmington Land Co., capital \$75,000, inctpd. by Carl Mendel, Samuel Bernstein, U. H. McLaws.

Ga., Valdosta—Southern States Development Co., D. F. Kirkland, V.-P., 2 Wall St., New York, N. Y., capital \$25,000, developing 12,000 acres in Jeff. Davis County; erect dwellings, clearing and fencing, water wells, plant fruit trees, etc.; D. B. Ferris, 2 Well St., New York, Archt. (Lately noted.)

Ky., Ashland—Park Hill Realty Co., increased capital from \$100,000 to \$300,000, develop 152 acre site. (Lately noted.)

Ky., Lexington—City Park Commn., interested in acquiring and developing park.

Ky., Louisville—Sleepy Hollow Realty Co., capital \$60,000, inctpd. by Samuel B. Kirby, Attila Cox, Harry Buckley.

Ky., Owensboro—City, probably develop Moreland woods for park. Address The Mayor.

La., New Orleans—Johnness Realty Co., develop "Elmer" sub-division, construct streets, sidewalks, etc.

Md., Baltimore—Oakfield Realty Co., 616 S. Charles St., inctpd. by Julius Cohen, Abraham Wise, A. Herman Siskind.

Md., Baltimore—Bedford Realty Co., 2 E. Lexington St., capital \$50,000, inctpd. by Wm. N. Wells, J. Clinton Watts, Nathaniel Watts.

Md., Frederick—Frederick City Realty Co., capital \$25,000 inctpd. by Mm. O. Kalb, Roy W. Poole, Benjamin Rosemou, Jr.

Mo., Kansas City—Longfellow Land Co., capital \$25,000, inctpd. by L. F. Rieger, J. M. Linger, August Jaiser.

Mo., St. Louis—Tug River Realty Co., inctpd. by Wayne Dameron, Harry Kaemmerer, Ida Wilson.

Mo., St. Louis—Williams & Bland, capital \$25,000, inctpd. by R. S. Williams, C. P. Bland, Minnie Spratte.

N. C., Elkins—Mitchel's River Orchard Co., J. B. Sparger, Mount Airy, N. C., capital \$100,000; will develop 500 acres for apple and peach orchard; approx. cost \$75,000. (Lately noted.)

N. C., Marston—Booth Orchard Co., capital \$100,000, inctpd. by H. B. Booth, James S. Sease and N. A. Cocke, both of Charlotte.

N. C., Winston-Salem—Forsyth Country Club Co., W. G. Jerome, Prest., capital \$85,000, develop 167 acres for golf course, cost about \$40,000; Fred Fogle, Winston-Salem, Engr.

N. C., Lexington—Town will develop park; L. A. Martin, Jr., T. S. Eanes, Park Commrs.

Tenn., Maryville—Grand View Cemetery Co., organized with R. M. Kesterson, Prest.; D. W. Brooks, V.-P.; A. E. Cruze, Secy.

Tex., Dallas—Perry Heights Realty Co., capital \$100,000, inctpd. by E. Gordon Perry, J. R. Shelton, Jack Taylor.

Tex., Ennis—City will establish parks and playgrounds; vote June 20 on \$15,000 bonds. Address The Mayor.

Tex., Houston—Valley Citrus Orchards, capital \$100,000, inctpd. with C. L. Hunter, Prest., 316 Mason Bldg.; E. J. Lapin, Secy., E. H. Fleming, Vice-Prest.; develop large acreage for citrus growing; erect nursery.

Tex., San Antonio—W. E. Rosecrans, George Hagelstein and W. F. Gillespie,

organized company with \$50,000 capital to develop Rosecrans Irrigated Gardens for sub-division.

Tex., San Juan—Rio Grande Valley Citrus Industries, inceptd. by W. G. Rice, B. L. Miller, O. C. Aldrich.

Va., Alexandria—Rose Crest Corp., C. H. Davis, Pres., 121 South Royal St. plans developing big acreage, initials start. 15 acres for sub-division; E. E. Fordham, 529 N. Columbia, Engr. in charge. (See Mch. Wanted—Lumber and Building Supplies.)

Va., Norfolk—Princess Park Land Co., capital \$25,000, inceptd. with Lawrence C. Page, Pres.; H. E. Page, Secy.

Va., Norfolk—Ocean Lot Investment Co., capital \$50,000, inceptd. with W. Frank Robertson, Pres.; C. O. MacDonald, Secy.

Lumber Manufacturing.

Fla., Franklin County—Thorn-Reed Lumber Co., capital \$400,000, inceptd. with George A. Reed, Pres., Hagerstown, Md.; John P. Thorn, Secy.-Treas. and Mgr., Martinsburg, W. Va.; holdings include 70,000,000 feet lumber.

Ga., Sandersville—T. J. Cooper Co., Pringle Bldg., inceptd. with T. J. Cooper, Pres.

La., New Orleans—Mengel Co., C. C. Mengel, Jr., V.-P., Louisville, Ky. reported to purchase saw mill plant of Joseph S. Otis Mahogany Co.; plant used entirely for sawing mahogany logs.

Md., Cumberland—Buchanan Lumber Co., increased capital to \$135,000.

Md., Salisbury—C. R. Disharoon Co., increased capital to \$175,000.

Mo., St. Louis—A. J. Newsham Lumber Co., capital \$15,000, inceptd. by A. J. Newsham, R. A. Thomann and E. J. Coff.

Tenn., Murfreesboro—Smyrna Lumber Co., purchased site to erect saw and planing mill; equipment purchased.

Tex., Amarillo—Nunn Lumber Co., capital \$30,000, inceptd. by J. L. Nunn, F. P. Spencer and P. R. Underwood.

Tex., Beekville—Beekville Lumber Co. establish planing mill, lay switch tracks.

Tex., Dallas—Stickle Lumber Co., erect \$350,000 plant, including 3 fireproof and 7 semi-fireproof buildings, 5 dry kilns with capacity of 70,000 ft. lumber; plants capacity 149 cars with open storage for 10,000,000 ft. and shed storage for 6,000,000 ft. lumber; lighting, sewage and water system; lay 1600 ft. railway switches; reported.

Metal-Working Plants.

Ala., Birmingham—Pipe—Imperial Pipe Co., inceptd. by Brewer Dixon, Sumner Thomas and Chester A. Odum.

Ala., Mobile—Drink Cooler—National Bottled Drink Cooler Co., 6 N. Joachim St., organized with K. C. Winter, Pres.; E. C. Grace, Vice-Prest.; J. C. Winter, Secy.-Treas.; mfrs. "Icebergdip" bottled drink cooler; has mch.; later will occupy fireproof building. (Lately noted inceptd., capital \$100,000.)

Fla., Apopka—Chemical Extinguishers—Apopka Fire Apparatus Co., inceptd. with A. C. Starbird, Pres.; M. R. Starbird, Secy.; mfr. fire equipment, chemical extinguishers, etc.

Fla., Jacksonville—Fly Screens—Florida Fly-Exit Screen Co., 316 Graham Bldg. (lately noted inceptd., capital \$50,000) organized with T. B. Elton, Pres.-Mgr. will erect 60x150-ft. fireproof plant, open bids about Aug. 15; install mch. for mfr. of screen doors. (See Mch. Wanted—Screen Door Mch.)

Fla., Leesburg—Sheet Metal—W. G. Taylor, plans establishing sheet metal works.

Ga., Atlanta—Porcelain—Standard Sanitary Mfg. Co., 295 Peachtree St., plans plant additions.

Ky., Louisville—Nails, etc.—Kentucky Steel & Wire Co., 809 Sparks Bldg., (lately noted inceptd., capital \$500,000), organized with A. H. Dillon, Pres.-Treas.; Joseph O'Donnell, Secy.; John R. Humphrey, Vice-Prest. & Mgr.; will erect light steel type wire mill, 25,000 sq. ft.; install additional mch. for mfr. of nails, barbed wire, galvanized staples, daily capacity 100 tons.

Mo., Carthage—Bed Springs—Leggett & Platt Bed Spring Co., C. B. Platt, Mgr. erect plant for mfr. of bed springs; approx. cost \$50,000; reported.

Okla., Oklahoma City—Corn Poppers—Coffey Rotary Corn Poppers Co., capital \$25,000, inceptd. by R. J. and L. W. Coffey, E. E. Barbee.

S. C., Columbia—Electro Plating—Columbia Electro Plating Works, 1110 Taylor St., organized with A. Hardy, Pres.-Mgr.; M. T. Durhan, Secy.; will install mch. for electro plating of all metals.

Tenn., East Chattanooga—Metal Poles, etc.—H. L. Judd Co., 87 Chambers St., New York; L. G. Clark, local Mgr.; will erect 3 additions to plant, construction by owner; has mch.; mfr. curtain poles, rods and few by-products.

Tex., Rockdale—Filters—Mo-Jo Filter Co., L. B. Jones, Mgr., has building; install press machines, jigs dies, turners tools, etc. for mfr. of filters. Previously noted inceptd. (See Mch. Wanted—Sheet Metal Tools.)

Tex., Waco—Barber Supplies—Waco Barber Supply & Mfg. Co., increased capital to \$40,000.

W. Va., Parkersburg—Wire—Seward Wire Co., capital \$150,000, inceptd. by O. S. Hawkins, Dave Kahn and E. S. Moore

Mining.

Ky., Newport—Sand—Kentucky Sand Co., \$60,000, inceptd. by Fred E. Douglas P. and C. S. Hall.

Ky., Typo—Sand and Gravel—Typo Sand & Gravel Co., inceptd. by H. H. Braden, G. S. Greer and J. D. Kries

Mo., Annapolis—Lead—Annapolis Lead Co., M. C. Rhodes, Pres. plans erecting power plant addition.

Mo., Kansas City—Gypsum, etc.—National Gypsum Co., capital \$100,000, inceptd. by Dr. Alexis Wade and B. G. and T. J. Riley.

Mo., Poplar Bluff—Iron—Iron Exploration Co., plans installing crushing, washing and screening plant, also power house.

Tenn., Knoxville—Sand and Lime—Knoxville Sand & Lime Co., re-organized by Milton McDermott and Thomas H. Johnstone; acquired holdings of Knoxville Sand & Transportation Co.; improve plant; daily capacity 750 bls. lime and 500 tons sand.

Va., Gloucester—Marl Lime—Roaring Springs Marl Springs Co., R. M. Janney, Propr., develop 10 acres, present capacity 20 tons; majority of mch. purchased. (See Mch. Wanted—Hoisting Drums; Engine (Oil))

Miscellaneous Construction.

Ark.-Tex., Texarkana—Levees—C. S. Christian, Dist. Engr. making plans for raising levees in following districts: Miller County Levee Dist. No. 2, protecting 90,000 acres; Bowie County Levee Dist. No. 1, protecting 10,000 acres and Garland County Levee Dist. protecting 45,000 acres.

D. C., Washington—Swimming Pool—Harry Wardman, reported to build swimming pool near Wardman Park Hotel, estimated cost \$15,000.

Fla., Pensacola—Docks—City Commrs. plans improvements on municipal docks, purchased Palafox dock property; City Engr., making tentative plans.

Fla., St. Joseph, P. O. Dade City—Memorial Monument—Clark Monument & Stone Co., Jacksonville, Fla. received contract to erect memorial monument, marking spot where first constitutional convention was held.

Fla., Tampa—Bulkhead—Seaboard Air Line Ry. Co., W. D. Fanchette, Ch. Engr., Norfolk, Va. let contract to C. E. Hillyer, Jacksonville, Fla. at \$8000 to construct Lackawanna steel pile bulkhead to protect piling in connection with Seidon Island phosphate elevator.

Fla., West Palm Beach—Dredging—Model Land Co., let contract to Neil Campbell to dredge 12 mi. canal in Cape Sable County, make road of equal length on bank of canal, and cut lateral ditches to connect with road canal; reclaiming 10,000 acres.

Fla., West Palm Beach—Sea Wall—City, Karl Riddle, Mgr. let contracts to Keystone Construction Co., and D. E. O'Hara to construct seawall at Phillips Point.

Ga., Waynesboro—Grain Elevator—Burke County Elevator & Marketing Co., A. M. Brasswell, Pres., let contract to R. L. Moore, Dublin, Ga. at \$15,000 to erect grain elevator.

Ky., Whitely County—Underpass—Breslin & Durett Construction Co., Louisville, Ky. received contract at \$19,190.97 to build underpass.

Md., Baltimore—Bulkhead—Public Improvement Comn. appropriated \$450,000 for construction of bulkhead at McComas St. in connection with general plan of port development; H. G. Perring, Ch. Engr.

Mo., Fulton—Swimming Pool—McIntire Ice Co., plans constructing swimming pool.

Tex., Houston—Elevator—Houston Merchants Exchange interested in erection of first unit of grain elevator.

Mo., Kansas City—Dikes—Kaw Valley Drainage Dist. plans dredging Kaw river, improve dikes, etc., contemplate \$400,000 bonds issue; George Long, interested.

Mo., Springfield—Mausoleum—Ben. J. Diemer, Pres., Green Lawn Cemetery, contemplates erecting \$75,000 mausoleum in Green Lawn cemetery; capacity not less than 250 crypts.

Tenn., Memphis—Swimming Pool—City let contract to Kaucher, Hodges & Co., Exchange Bldg. to construct municipal swimming pool, 1 story, 276x83-ft., capacity 2000 persons, concrete, brick and steel construction; pool operated by Park Commrs.

Tex., Beaumont—Ferry—William Saenger, plans establishing pontoon ferry service across Neches River at Hickory St.

Tex., Houston—Subway—Southern Pacific Co., G. W. Boschke, Ch. Engr., San Francisco, Cal. have agreement with city to construct subway; let contract to Walling-Haralson & Adams Co.

Va., Mount Jackson—Caverns—Shenandoah Caverns, H. B. Chapman, Woodstock, Va., expending between \$50,000 and \$100,000 on improvements to caverns, including buildings, installation of 75 H.P. oil engine attached to 65 K.V.A. generator, wire and lead cable wiring, etc.

Va., Norfolk—Wharf and Jetties—City, Charles R. Ashburner, Mgr. will construct wharves and jetties in connection with municipal Terminal Project, work includes 1400 ft. marginal wharf 34 ft. wide of reinforced

concrete or combination of concrete and creosoted lumber; 350 ft. marginal wharf, 18 ft. wide of creosoted timber, and about 1500 ft. of jetty of creosoted piles; bids until May 24; Folwell-Ahlskog Co., Contrg. Engr., 600 Seaboard Bank Bldg. (See Mch. Wanted—Wharves and Jetties.)

Miscellaneous Enterprises.

Ala., Haleyville—Printing—E. P. Lake-man will establish printing plant, install job printing outfit; and newspaper press later. (See Mch. Wanted—Printing (Job) Outfit.)

Ala., Montgomery—Laundry—Capitol City Laundry Co., expending about \$60,000 on construction of laundry plant.

D. C., Washington—Electrical Engineering, etc.—Reliance Electric Co., 818 L St., S.E., organized with Arthur Rankin, Pres.; Melvin Y. Hall, Secy.; rebuild electric motors, etc., electrical contracting and repair shop. (Lately noted inceptd., capital \$10,000.)

Fla., Daytona — Transportation — East Coast Coach Co., capital \$500,000, inceptd. with C. Coles, Pres.; L. E. Herb, Secy.-Treas.

Fla., Daytona—Laundry—H. F. Cliff let contract to B. W. Johnson to erect steam laundry plant, galvanized iron construction.

Fla., Miami—Motion Pictures — Screen Talent Studios, capital \$15,000, inceptd. with E. C. Pinkston, Pres.; Kay Mantell, Secy.-Treas.

Fla., Sulphur Springs—Publishing—Suburban Sun Publishing Co., capital \$10,000, inceptd. with J. P. Hamilton, Pres.; I. G. Hedrick, Secy.

Fla., West Palm Beach—Fire Fighting Equipment—City plans equipping and maintaining fire department, purchase high pressure water system for fire protection purposes; vote June 6 on \$100,000 bonds. Address Mayor Biggers.

Fla., West Palm Beach—Engineering—Citizens Investment Co., capital \$100,000, inceptd. by B. A. Maxfield, Geo. W. Potter and E. C. Rumsey.

Ky., Dawson Springs—Mineral Water—Dawson Salts & Water Co., increased capital from \$15,000 to \$30,000.

Ky., Louisville—Music—Paramount Music Co., capital \$15,000, inceptd. by R. K. Walker, I. A. Geiselman and Steve Campbell.

Ky., Paducah—Publishing—News-Democrat Publishing Co., capital \$50,000, inceptd. by George H., Martha E. and Crumbaugh Goodman.

Ky., Princeton—Re-drying Plant—Princeton Tobacco Co., R. M. Pool, plans erecting fireproof building, capacity to handle 20,000,000 lbs. tobacco, \$75,000; install dryer, elevators, etc.; \$20,000. (See Mch. Wanted—Elevators; Trucks; Dryer (Tobacco).)

La., Monroe—Tailoring—E. Jack Selig Tailoring Co., 224 DeSiard St. established tailoring plant.

La., Monroe — Cleaning, etc. — Russell Cleaning & Dyeing Co., re-organized by C. R. Russell.

Md., Baltimore—Contracting, etc.—Universal Contracting & Wrecking Co., 3 N. Central Ave., capital \$100,000, inceptd. by Albert M. Griffin, Benjamin Robener and John E. Marshall.

Md., Baltimore—Transportation — Great Maryland Aid Lines, 511 Calvert Bldg., capital \$10,000, inceptd. by Leland T. Reccord, Addison G. Person and Eugene G. West.

Md., Baltimore—Stevadoring, etc.—Atlas Stevedore & Weighing Co., 820 George St.; inceptd. by Bradley H. Waltz, George Rukert and Harvey C. Bickel.

Md., Baltimore—Printing—State Board of Prison Control, consider installing printing shop, remodel and equip dormitory, estimated cost \$40,000; plans printing all office forms and reports for various State Depts.

Miss. Gulfport — Publishing — Beanel & Higginson, Box 48, Biloxi, Miss. has contract to erect Herald bldg., at \$10,668.

Mo., Fredericktown—Printing—News Publishing & Printing Co., let contract to rebuild plant. (Lately noted burned, at loss of \$15,000.)

Mo., Joplin—Cleaners, etc.—James Chemical Cleaners, H. Tom James, 721 Main St. plans plant addition, install equipment for the mfge. of buttons and pleating works.

Mo., Kansas City—Printing—McDonald Muehlbach Lithographing Corp., capital \$20,000, chartered by Geo. Muehlbach, A. G. and Bruce McDonald.

Mo., Kansas City — Undertaking — Nommensen Mortuary, inceptd. by A. E., E. E. and Adeline Nommensen.

Mo., Kansas City—Electrical Supplies—Electrical & Magneto Service Co., \$20,000, inceptd. by Eugene Trefz, L. P. Smeltzer and O. K. Newby.

N. C., Asheville—Advertising—Street Advertising Service, inceptd. by C. H. Oates, Hendersonville, N. C.; G. B. Oats and E. W. Lindsay, Asheville.

N. C., Charlotte—Advertising—Carolina Road Service Co., capital \$10,000, inceptd. by E. H. Tarrant, W. E. Sloan and A. R. Brodin.

N. C., Salisbury—Greenhouses—J. V. and John W. Hanford, Proprs., Salisbury Greenhouses, have under construction six 28x142-ft. greenhouses.

N. C., Wilmington—Grading House—New Hanover Truckers Assn., W. C. Montgomery, Secy., has under construction plant for grading cucumbers daily capacity 4 cars; purchased 5 grading machines.

S. C., Abbeville—Potato Curing—Wayne G. McGowan, County Agent, reported plans for the erection of 10,000 bu. capacity potato curing house.

S. C., Florence—Printing—Florence Printing Co., capital \$10,000, inceptd. by J. B. Parnell and J. A. Zeigler.

Tenn., Knoxville — Building — Jefferson Trust Co. capital \$50,000, inceptd. with O. L. Benton, Pres.; Worley Harr, Treas.

Tenn., Paris—School Supplies — Paris School Supply Co., capital \$15,000, inceptd. by N. T. Laory, Clarence Allen and J. J. Hill.

Tex., Bastrop — Fair Grounds — Bastrop County Fair Assn., inceptd. by W. B. Ransome, W. A. McCord and P. C. Maynard.

Tex., Dallas—Laundry—Dallas Towel Supply Co., 2507 Commerce St. erect 1 story laundry, brick construction; estimated cost \$20,000.

Tex., Dallas—Plumbing—Prichard & Levy, capital \$12,000, inceptd. by H. A. Prichard, M. B. Levy and C. H. Lacy.

Tex., Dallas — Construction — Virginia Building Co., capital \$160,000, inceptd. by C. D. Cain, C. E. Marvin and C. S. Connell.

Tex., Houston—Engraving—Southwestern Engraving Co., capital \$18,000, inceptd. by J. J. Walden, J. C. Hooper and Be T. Scott.

Tex., Memphis—Laundry—Memphis Steam Laundry Co. erect laundry plant on Noel St., brick construction.

Tex., Orange—Towing—Higman Towing Co., capital \$65,000, inceptd. by J. W. Higman, H. L. Brown and Joe Miller.

Tex., San Antonio—Transfer—Black & White Cab & Transfer Co., capital F. O.

Davidson, L. A. Jackson and I. P. Roessler.

Tex., San Antonio—Transportation—Yellow Cab Co., inceptd. by R. O. Snowdon, O. O. Edmundson and R. T. Strong.

Tex., Waco—Publishing—Waco Publishing Co. will occupy leased building; structure is being remodeled, costing \$15,000; install 16 page Duplex printing press, purchased; contract let by owners, Geo. and Fred B. Robinson, C. J. Glover, Jr. (Supersedes recent item.)

Tex., Waco—Transportation—Yellow Cab Co., inceptd. by C. W. Meadows, J. W. Davis and Temple Harris.

Va., Alexandria—Publishing—Nowell-Cole Co., capital \$25,000, inceptd. with Joseph M. Nowell, Pres.; George C. Cole, Secy.

Va., Charlottesville — Publishing — Surber-Arundale Co., W. H. Surber, Pres., increased capital from \$100,000 to \$125,000.

Va., Norfolk—Construction—Ocean Lot Investment Co., capital \$50,000, inceptd. by W. Frank Robertson, Pres.; C. A. McDonald, Secy.

Va., Richmond—Construction—McGuire & Rolfe, capital \$100,000, inceptd. with R. B. Gwathmey, Pres.; H. C. Tyree, Secy.

Va., Virginia Beach — Hotel — Virginia Beach Hotel Corp., chartered by O. B. McLean, H. O. Michole and H. Garrett Smith.

W. Va., Huntington—Incinerator—City, C. E. Templeton, Auditor, contemplate erecting \$24,000 incinerator for western section of city.

W. Va., Huntington—Amusement—Huntington Luna Park Co., capital \$100,000, inceptd. by J. E. Thompson and J. J. Stender, Huntington; S. A. Lewis, Cabin Creek, W. Va.

W. Va., Kimball—Undertaking—Kimball Undertaking Co., capital \$10,000, inceptd. by John Steele and J. H. Page, Kimball; M. T. Whittico, Keystone, W. Va.

Miscellaneous Factories.

Ala., Birmingham—Cheese and Butter—Thorvald Hansen and Karl Anderson contemplate constructing additional unit to cheese and butter plant.

Ala., Tuscaloosa—Radio—Southern Radio Co., inceptd. with Fred R. Maxwell, Jr., Pres.; M. S. Estes, Gen. Mgr.

Ark., Everton—Corn Cob Pipes—Everton Mining & Development Co., Joseph Migliore, 71 W. 23rd St., New York, has plant with daily output 100 gross corn cob pipes; will install oil engine, lathes, boring and circular saws. (oil engine purchased) invite bids (See Mch. Wanted—Turning Lathes; Boring Machines; Circular Saws.)

Ala., Montgomery—Candy—Difflly-McGlynn Candy Co., inceptd. by F. P. Difflly, P. H. McGlynn, H. W. Liddon.

Fla., Tampa—Cigars—Arango y Arango, capital \$100,000, inceptd. with Francisco Arango, Pres.; Leonidas Arango, V.-P. and Secy.

Fla., Tampa—Drugs—Patricks Drugs, capital \$100,000, inceptd. by Geo. D. Patrick, Carl L. Kindred, John W. Patrick.

Fla., Tampa—Shoes—Livingston Shoe Co., capital \$25,000, inceptd. by G. A. Brummette, R. O. Livingston, R. C. Terry.

Fla., West Palm Beach—Ice Cream—Gibson Baking & Ice Cream Co., let contract to H. C. Daniels, to construct plant to mfge. ice cream and Eskimo pies; one story and basement, second story probably added later; 60x40 ft.; reinforced concrete and tile; install special chocolate dipping room also insulated cork room; refrigerating machine capacity ten tons; daily capacity, 1000 gal. ice cream, 6000 Eskimo pies.

Ga., Atlanta—Loft—Massell Realty Co., erect industrial building at Whitehall St. and Stewart Ave.; 3 story and basement; brick, steel and concrete; cost \$150,000.

Ky., Louisville—Radio—Radio Electrical Co., inctpd. by H. B. and Wm. S. Driver, Henry L. Myers.

Md., Baltimore—Insulators—Locke Insulator Co., Donald Symington, Prest., Maryland Trust Bldg., erect 1 story 80x80-ft. brick addition to plant at Charles and Cromwell St.; estimated cost \$35,000.

Md., Baltimore—China, etc.—H. P. Chand-lee Sons Co., 12-14 W. Lombard St., capital \$200,000, inctpd. by Geo. M. Chandlee, Theodore M. Chandlee, Jesse Englar.

Md., Baltimore—Drugs—Ernest E. Stanley, Calvert Bldg., interested in organization of company to establish chemical manufacturing plant at Madison Ave. and Biddle St.; has building.

Miss., Greenwood—Brushes—Fuller Brush Co., Hartford, Conn., reported to establish branch plant.

Miss., Gulfport—Spaghetti—Joseph Tripppe will establish spaghetti factory.

Mo., Jefferson City—Strawboard—Standard Crate & Filler Co., A. W. Happy, Prest., will construct plant with daily capacity 500 tons; cost \$100,000; install \$400,000 mch.; Trix Colman Contracting Co., Archt. (Lately noted.)

Mo., Paris—Bakery—Jack McGhee purchase building, equip for bakery.

Mo., Richmond—Bakery—Wade & Bell erect building, equip for bakery.

Mo., St. Joseph—Biscuits—National Biscuit Co.; construct addition to power plant.

Mo., Springfield—Toilet Preparations—Dental Laboratories, capital \$50,000, inctpd. by T. K. Faulkner, P. H. Wendell, A. C. Markham.

Mo., St. Louis — Monuments — Reliance Monument Co., capital \$5000, inctpd. by Gladys A., Johannah E. and Wm. A. Scherr.

Mo., St. Louis—Chocolate—Hesley Chocolate Co., capital \$50,000, inctpd. by I. J. Hesley, L. H. Edwards, John Hose.

N. C., Mooresville—Brooms—Acme Broom Co., capital \$100,000, inctpd. by E. H. Miller, A. M. Henderson, A. B. Bandigee.

Okla., Enfauia—Cheese—Marlatt & Clark, Los Angeles, Cal., interested in establishing cheese factory.

Okla., Tulsa—Battery—Osage Battery Co., inctpd. by Dr. J. C. L. Ceell and J. Cruce Warmack.

S. C., Greenville—Glass—Gray & Son Glass Co., Geo. R. Gray, Prest., Falls Creek, considering erection of glass plant.

Tenn., Jackson—Candy—Jackson Candy Co., capital \$5000, inctpd. by W. L. Reid, S. T. Barnett, W. A. Weller.

Tenn., Knoxville—Marble Products—Great Eagle Marble Mill, capital \$75,000, inctpd. by M. C. Munday, J. G. Carson, E. F. Klein; establish plant to mfr. marble products.

Tenn., Memphis—Radio Parts—Ozburn Abston Radio Co., capital \$50,000, inctpd. with N. F. Ozburn, Prest., establish plant to mfr. radio parts.

Tex., Dallas—Radio—Atlantic Radio Sales Co., capital \$10,000, inctpd. by G. A. Doering, J. L. Smith and W. A. Southworth.

Tex., Dallas—Ice Cream—M. B. Ice Cream Co., capital \$25,000, inctpd. by A. P. Mc-Lendon, A. Braun, H. F. Owsley.

Tex., Houston—Battery—Gould Battery

Service, Inc., inctpd. by C. A. Willis, R. R. Roberts, C. R. Clark.

Tex., San Antonio—Candy—Jenner Mfg. Co., increased capital from \$75,000 to \$125,000. (Lately noted.)

Tex., San Antonio—Jewelry—Bell Jewelry Co., capital \$100,000, inctpd. by B. M. Hammond, J. F. Davis, Emma S. Bell.

Tex., Tyler—Drugs—Odom Drug Co., capital \$6000, inctpd. by T. L. Odom, W. R. Chitwood, W. B. Watson.

Va., Bristol—Butter—Darter Butter Co., capital \$25,000, inctpd. with O. L. Darter, Prest.; E. D. Darter, Secy., Holston Valley, Tenn.

Va., Norfolk—Beverages—Normandie Corp., capital \$10,000, chartered with Thomas A. Murray, Jr., Prest., Atlanta, Ga.; Charles A. Anderson, Secy., Ocean View, Va.

Va., Richmond—Rubber—Virginia Carolina Rubber Co., let contract to E. L. Bass & Bros. to construct first unit of plant at Government Rd. and Southern Ry.; 250x110 feet.

Va., Roanoke—Paints—Jefferson Paint & Glass Co., inctpd. with H. W. Lynch, Leesville, Prest.; L. B. Cabaniss, Roanoke, Secy.

Va., West Point—Pulp Board, etc.—Chesapeake Corp., W. C. Gouldman, Secy., will construct additional mill in fall, cost about \$600,000. (Lately noted.)

W. Va., Charleston—Ice Cream—Angel Cream Corp., lately noted inctpd. with \$25,000 capital, organized with O. Sirrat, Prest.; E. F. Kirgan, V-P.; Sam Cummins, Secy.; mfr. combination cake and ice cream.

W. Va., Huntington—Tobacco—Huntington West Virginia Tobacco Co., capital \$30,000, inctpd. by C. W. Strickling, J. W. Hagen, Jr., M. S. Halstead.

W. Va., Huntington—Thermos Bottles—American Thermos Bottle Co., C. R. H. Vischer, Secy., will construct additional building for plant; 470x240 ft.; 113,000 ft. floor space; contracts let.

W. Va., Huntington—Shoes—Perry-Norvell Shoe Co., Geo. E. Norvell, Prest., will erect shoe plant at 25th St. and Guyan Ave.; first unit 40x200 ft.; 6-story; steel and brick; cost \$100,000; John W. Wickersham, Lancaster, Pa., Contr.; also double capacity of present plant.

W. Va., Nitro—Chemical—Carrier Chemical Co., capital \$150,000, inctpd. by C. F. Carrier, Jr., M. T. Davis, Jr., Arch Krieg., all of Charleston.

Motor Cars, Garages, Tires, Etc.

Fla., Daytona—Garage—Atlantic Garage Co., capital \$25,000, inctpd. with J. W. Myers, Prest.; L. D. Chandler, Gen. Mgr.

Fla., Orlando—Motors—Franklin Motor Co., capital \$25,100, inctpd. with M. O. Overstreet, Prest.; Hans Jensen, Secy.-Treas.

Fla., Quincy—Motors—Lindsey-Hay Motor Co., capital \$10,000, inctpd. with L. E. Hay, Prest.; L. M. Lindsey, Secy.-Treas.

Fla., St. Augustine—Motors—St. Johns Motor Co., capital \$50,000, inctpd. with John W. Roddenberry, Prest.; Ray L. Hendricks, Secy.-Treas.

Fla., Tallahassee—Automobiles—Bode-Schneider Co., capital \$10,000, inctpd. by Samuel Schneider, Ernest W. Fielding and S. Louis Bade.

Fla., Miami—Motors—Miami Motor Mart, inctpd. with D. L. Clark, Prest.-Treas.; E. Clyde Vining, Secy.

Fla., St. Petersburg—Garage—F. E. McArthur, plans erecting 2-story garage

Ga., Atlanta—Filling Station—Gulf Refining Co., reported to erect 1-story filling station, brick construction.

Ga., Atlanta—Automobile Chains—National Chain Dealer Assn., capital \$250,000, inctpd. by Mark Molding, W. P. Bloodworth and R. S. Lang.

Ky., Ashland—Automobiles—Ashland Auto Sales Co., capital \$25,000, inctpd. by William C. Simpson, Max Stock and E. S. Cogan.

Ky., Louisville—Garage—Haury Motor Co., 811 S. 3rd St., let contract for construction of 2-story, 60x200-ft. garage.

Md., Baltimore—Garage—Parking Space Co., 37 South St., inctpd. by Matthew S. Atkinson, Jr., Theodore G. Lureman, Jr. and Charles H. Tilghman.

Md., Baltimore—Motors—Winton Co. of Baltimore, 1432 N. Charles St., capital \$80,000, inctpd. by Irvin J. Sullivan, James L. Thomas and George F. Whiting.

Md., Baltimore—Motors—Grant Motors of Maryland, capital \$25,000, inctpd. by Charles F. Montague, Joseph E. and Charles E. Marsh.

Md., Baltimore—Garage—Baltimore Automobile Painting & Top Co., 1533 Myrtle Ave., inctpd. by J. Carroll Swinderman, John E. Magers and others.

Okla., Ringling—Motors—Ringling Motor Co., capital \$25,000, inctpd. by Paul R. Hedlund, Ringling; Jonas and W. B. Hedlund, Elk City, Okla.

S. C., Columbia—Motors—Standard Motor Co., inctpd. by Holmes Simons and R. H. Moffatt.

S. C., Greenville—Automobile Accessories, etc.—Eugene F. Bates, contemplates erecting 65x140-ft., 2 story automobile building on Laurens St., front finished with white pressed brick, tile floors; equip with electric elevators, and all labor saving devices, J. E. Sirrine, Archt.

Tenn., Memphis—Tires, etc.—Four Sixteen Tire & Vulcanizing Co., increased capital to \$75,000.

Tex., Center—Motors—Dillon-Bruce Motor Co., lately noted inctpd., capital \$20,000, organized with E. I. Bruce, Prest.; T. H. Dillon, Secy.-Treas.; successor to E. I. Bruce.

Tex., Houston—Garage—Johnston Motor Co., erect \$35,000 garage on McKinney Ave.; brick construction.

Tex., Luling—Motors—Freney-Chapman Motor Co., capital \$20,000, inctpd. by Isador Moser, G. G. and Leon Jacobs.

Tex., Victoria—Motors—Smith-Welder Motor Co., capital \$10,000, inctpd. by W. H. Smith, J. J. and R. H. Welder.

Va., Richlands—Motors—Richlands Motor Co., inctpd. with L. A. Tynes, Prest., Tazewell, Va.; W. G. Lowe, Secy., Cedar Bluff, Va.

Va., Richmond—Automobile Accessories—Velle Sales & Service Corp., capital \$25,000, chartered with L. A. McMullin, Prest.; William J. Anderson, Secy.

W. Va., Princeton—Garage—Dr. McComas, has under construction 60x100-ft. garage building on Main St., brick and concrete construction, steel trusses to span first floor; modern garage and auto repair shop.

W. Va., Richwood—Garage—John Metz, Propr., Richwood Electric Co., has under construction 60x60-ft. garage, tile and steel construction; George Peak & Son, in charge of work

Railways.

Mo., St. Louis—Missouri Pacific Railway has let contracts to fill in ten trestles and build concrete culverts near Aurora, Mo., to Jerome Moss, of Chicago, Ill.; Roach & Stan-

In writing to parties mentioned in this department, it will be of advantage to all concern-

the Manufacturers Record is mentioned.

sell, of Memphis, Tenn., and Walter Denison, of Cushman, Ark., jointly.

Okl., Vinita—Oklahoma Northern Railroad Co. has asked the Interstate Commerce Commission for authority to build a line from Vinita, Okla., to Coffeyville, Kans.

Railway Stations, Sheds, Etc.

Md., Hagerstown—Pennsylvania R. R., A. C. Shand, Ch. Engr., Philadelphia, Pa. and Norfolk and Western Ry. Co., J. E. Crawford, Ch. Engr., Roanoke, Va., reported to establish engine terminal; probably erect railroad shops.

N. C., Hamlet—Seaboard Air Line Ry., W. D. Faucette, Ch. Engr., Norfolk, Va. has under construction, improvements to car shops.

Road and Street Construction.

Ala., Birmingham—City and Jefferson County plan constructing Mount Pinson and Fairfield-Fairview road; concrete or reconstructed base; A. J. Hawkins, City Engr., Claude A. Rogers, County Engr.; invite bids soon.

Alabama—State Highway Comsn., Montgomery, Ala., let contracts for following: Monroe County, 8.23 mi. gravel road between Jones Mill and Monroeville; to Alabama Construction Co., Montgomery, at \$34,405.40.

Coosa County, 13.5 mi. road; 10.29 mi. penetration macadam; rest gravel; to Fennell Co., Tuscaloosa, Ala., at \$223,814.76; W. S. Keller, State Highway Engr.

Ala., Linden—State Highway Comsn., Montgomery, Ala., plans constructing 20-mi. gravel road between Demopolis and Linden; invite bids soon; W. S. Keller, State Highway Engr.

Ala., Tuskegee—Government will construct roads and bridges from city limits to site U. S. Veterans' hospital, to be built; \$200,000 available; Jas. R. Fain, Supt. Road Construction for Treasury.

Ark., Fayetteville—State Highway Dept., Little Rock, Ark., plans constructing State Highway from Winslow to Blackburn.

Ark., Forrest City—St. Francis County, Road Improvement Dist. No. 2. For full detail see Mch. Wanted—Road Construction.

Ark., Fort Smith—City will pave N. 6th St., with concrete base and asphalt top. Address The Mayor.

Ark., Pine Bluff—City, M. C. Hollis, Mayor, will pave streets in Paving and Curb and Gutter Dist. No. 61; 17th, 18th and 19th Aves.; Pine, Chestnut and Walnut Sts.; concrete, bitulithic macadam, asphalt, etc.; Fred Bennett, Eng.

Ark.-Tex., Texarkana—City plans constructing concrete roadway through State Line cemetery; Otto Yenglin, Texas City Engr.

Fla., Bradentown—City let contract to Henry R. Curry to pave streets in Point Pleasant Sub-Division; to Shirley, Mattison and Shirley to construct gutters and curbing in sub-division. Address The Mayor.

Fla., Coconut Grove—For full details see Sewer Construction.

Fla., Eustis—For full details see Sewer Construction.

Fla., Homestead—City, S. E. Livingston, Mayor. For full detail see Mch. Wanted—Paving.

Fla., Jacksonville—City Comsn., Frank H. Owens, Chmn., let contracts to F. W. Long & Co., for following: 10,800 sq. yds. vitrified brick pavement on 6-in. concrete base, at \$56.670; and 19,000 sq. yds. asphaltic con-

crete pavement on 6-in. concrete base, at \$86,250; W. E. Shedd, City Engr.

Fla., Miami—City plans expending \$752,000, to pave additional streets. Address The Mayor.

Fla., Okeechobee—Okeechobee County Commrs. will construct 2 roads. For full detail see Mch. Wanted—Road Construction.

Fla., St. Petersburg—City, E. C. Garvin, Director Public Works, for full details (See Mch. Wanted—Paving.)

Fla., Tampa—Hillsborough County Commrs. will construct 160 mi. new highways; vote June 20, on \$3,000,000 bonds.

Fla., Tavares—Lake County Commrs., H. R. Ferran, Chmn., let contract to Lake County Construction Co., Leesburg, Fla.; grade, drain and surface with sand-clay or shell 19 mi. section road A, in East Lake County Special Road and Bridge Dist., between Altoona and Astor; Geo. E. Heller, County Engr.

Fla., West Palm Beach—Palm Beach County Commrs., let contract to M. F. Meyers, Belle Glade, Fla., at \$13,895, to construct 9½ mi. Everglades road between Belle Glade and Pahokee.

Fla., West Palm Beach—Palm Beach County plans constructing road district extending 30 mi. from Swinton Ave. in Delray to Everglades, through township 46; will include 6 roads; cost \$70,000; improve Atlantic Ave. from town west; widen and improve Alken St., south of town to Dixie Highway. Address County Commrs.

Fla., West Palm Beach—Palm Beach County Commrs., let contract to Tom M. Bryan, Fort Lauderdale, Fla., at \$190,000 to improve road-bed; install culverts and surface 20-mi. Okeechobee road from Mile Post No. 21 to Belle Glade, on Hillsboro Canal; conglomerate material of marl, rock and shell; 24-ft. wide; R. F. Goodman, County Engr.

Also let contract to R. Tomasello, at \$9000 to construct Jupiter ocean beach road, in Special Road and Bridge District.

Let contracts to H. H. Johnson Co., A. O. Greynolds and Maule Paving Co., to construct sidewalks.

Fla., Winter Haven—For full details (See Sewer Construction.)

Ga., Atlanta—City. For full detail see Mch. Wanted—Paving.

Ga., Atlanta—City, plans paving Euclid Ave. from Clifton Ave. to Candler Park; widen Clifton Ave., from McLondon St. to Ponce de Leon Ave.; also pave streets and walks in eastern part of park. Address The Mayor.

Ga., Augusta—City, J. M. Smith, Mayor, will grade, pave and macadamize Arsenal Ave. from Central Ave. to McDowell St.

Ga., Savannah—Chatham County Commrs., bonds.

Kentucky—State Highway Comsn., Frankfort, Ky., will construct 3 mi. road east and west through Trigg County; Federal Aid Project.

Jackson County, 18-mi. road from McKee through Big Hill County and Berea to Madison; cost \$300,000; Jackson County to pay \$125,000; Madison County \$30,000.

Kentucky—State Highway Comsn., Frankfort, Ky., let contracts for following:

Bourbon County, 1 mi. Paris-Cynthia Road, from city limits of Paris to Junction Georgetown Road, St. 52 plus 80; State Aid Project No. 21, Section C.

Bourbon County, 8.93 mi. Paris-Winchester Road from city limits of Paris to Clark County line, Station 471 plus 70; State Aid Project No. 50, Section A.

Harrison County, 5.59 mi. Cynthia-Paris

Road from city limits of Cynthia to Station 295 plus 28; State Aid Project No. 21, Section F.

Above let to Eaton Oil Works, Covington, Ky.

Scott County, 2 mi. Georgetown-Williams-town Road, from Station 1013 to Station 808; State Aid Project No. 22, Section F.

Rockcastle County, 7.23 mi. Mt. Vernon-London Road from city limits of Mt. Vernon, southerly to Station 382; State Aid Project No. 5, Section M.

Hart County, 6.67 mi. Munfordville-Elizabeth Road from city limits of Munfordville, Station 254 to Station 606 plus 50; State Aid Project No. 11, Section H.

Nelson County, 4 mi. Bardstown-Bloomfield Road from city limits of Bardstown to Station 211 plus 00 on Stoner Pike; State Aid Project No. 18, Section E.

Montgomery County, 3.1 mi. Mt. Sterling-Frenchburg Road from city limits of Mt. Sterling to Station 163 plus 68; State Aid Project No. 32, Section B.

Nelson County, 4.55 mi. Bloomfield-Lawrenceburg Road from Station 7 plus 12 to Station 247 plus 68; State Aid Project No. 44, Section C. Above let to F. E. Breslin, Louisville.

Boyd County, 4.17 mi. Ashland-Cannonsburg Road, from Station 0 to Station 221 plus 05; State Aid Project No. 47, Section P.

Mercer County, 8.64 mi. Harrodsburg-Danville Road from city limits of Harrodsburg to Station 192 plus 34; State Aid Project No. 22; Section F. Above let to R. B. Tyler, Louisville.

Boyle County, 5.1 mi. Danville-Lexington Road from city limits of Danville to Station 269 plus 28; State Aid Project No. 25; Section C. Above let to Ohio Road Improvement Co., Columbus, O., total cost \$55,705.

Kentucky—State Highway Comsn., Frankfort, Ky., let contracts for following:

Montgomery County, construct 4½ mi. Midland Trail, to O. P. Raymond Construction Co., Cynthia, Ky., at \$141,303.09.

Meade County, grade and drain 9.3 mi. State Highway, Project No. 65; to Grippen Construction Co., Knoxville, Tenn., at \$42,180.97.

Kentucky—State Highway Comsn., Frankfort, Ky., will construct following:

Federal Aid Project No. 29, Sec. C, Laurel County, 5.5 mi. London-Mt. Vernon road, from Rockcastle River to beginning F. A. Project No. 29 B; grade and construct drainage structures; 16-ft. wide; rock asphalt, bituminous macadam penetration or water-bound macadam surface, treated.

Federal Aid Project No. 65, Meade County, 9.3 mi. Louisville-Paducah road from West Corp. Lts., Brandenburg to Breckenridge County line; grade and construct drainage structures; 24-ft. wide.

Federal Aid Project No. 23, Sec. C, Whiteley County, .2 mi. Williamsburg-Corbin road near Faber, Ky.; grade and construct drainage structures; bids opened; Joe S. Boggs, State Highway Engr., Raleigh.

Ky., Jeffersonville—City, Comm. on Parks and City Hall plans resurfacing driveways in Warder Park with rock screenings.

Ky., Whitesburg—Letcher County Fiscal Court. For full detail see Mch. Wanted—Road Construction.

Ky., Wickliffe—Ballard County Commrs., plans expending \$80,000 to improve roads from Wickliffe to McCracken and Carlisle County lines.

La., Baton Rouge—East Baton Rouge Parish Police Jury, 4th Ward, will construct road along east side Louisiana Ry. and Navigation Co., from intersection Baton Rouge-Bayou Sara road with Whites and

Cypress bayous drainage canal to Port Hudson, and from Port Hudson to East Feliciana line; voted \$40,000 bonds.

La., Houma—Louisiana Highway Comsn. For full detail see Machinery Wanted—Road Construction.

La., Jennings—Jefferson Davis Parish Police Jury let contract to Fox Lumber Co., at \$52,968.75, to construct 26 mi. gravel highway in road sections 1 to 15; also construct connecting road from Lake Arthur to Vermillion Parish.

La., Monroe—Ouachita Parish Police Jury, J. M. Breard, Prest., construct 2 highways. For full details (See Mch. Wanted—Road Construction.)

La., Vidalia—Louisiana Highway Comsn., Maison Blanche Annex, New Orleans, La., plans expending about \$30,000 to repair Vidalia and St. Joseph Highway; Duncan Buie, State Highway Commr.

Md., Oakland—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md., will grade and drain 3.9 mi. State Highway. (For full details see Mch. Wanted—Road Construction.)

Maryland—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md., will construct roads in following:

Howard County, 3 mi. State Highway from end Cont. No. HO-13 toward Montgomery County line; Cont. No. HO-21; concrete.

Baltimore County, 2 mi. State Highway along Park Heights Ave., from end Cont. No. B-41 to Caves Road; Cont. No. B-51; macadam resurfacing.

St. Mary's County, 3.48 mi. State Highway from end Cont. SM-15 to Colton, Cont. No. SM-16; gravel.

Cecil County, .91 mi. State Highway from Rowlandville toward Five Points; Cont. No. CE-39; concrete; bids until May 23. (See Machinery Wanted—Road Construction.)

Md., Baltimore—State Roads Comsn., 601 Garrett Bldg., will pave 25th St. from Greenmount Ave. to Harford Road; construct 50-ft. boulevard; plans constructing park in center; invite bids next week.

Md., Baltimore—City, R. Keith Compton, Chrmn. Paving Comsn., will pave, repave and resurface with improved pavement following streets: Kathland Ave., from Hillsdale road to Granada Ave.; Lakeside Ave., from Hillen road to Tivoli Ave.; Stockton St. from Winchester to Laurens Sts.; Oaksley Road from Green Spring Ave. to 390 ft. northeast; Lyndhurst St. from Franklin to Mulberry Sts.; Linnard St. from Harlem Ave., north; Grantley St., north.

Md., Baltimore—City, Board of Awards, Wm. F. Broening, Prest., will construct Paper Mill Bridge road; Cont. No. 54; low bidder. D. C. McAleer, at \$17,689; Wm. E. Megraw, Water Engr.; G. H. Leaverton, Plant Engr.

Md., Baltimore—City, Wm. F. Broening, Prest. Board of Awards, plans expending \$100,000 to connect Falls road with Maryland Ave. at Lanyale St., 2 mi.; expend \$16,000 to pave Lanvale St. between Charles St. and Maryland Ave.; A. E. Christliff, Highway Engr.

Md., Towson—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md., let contract to Tydings Marine Contracting Co., at \$38,545, to construct 1.93 mi. standard concrete roadway along North Point road; Cont. No. B-47.

Mississippi—State Highway Dept., Meridian, Miss., will construct following roads:

Marshall County, 3 mi. State road from Holly Springs to Memphis; bids opened May 16 by Chancery Clk.

McComb, 2.61 mi. on Centerville-Gloster road; bids until May 19 from City Clk.

Jasper County, 14.3 mi. between Meridian

and Hattiesburg; bids until June 6 from Chancery Clk. at Bay Springs.

Itawamba County, 9 mi. between Alabama line and Tupelo; bids until June 6 from Chancery Clk. at Fulton.

Wayne County, 10,242 cu. yds. surface gravel on Project 135; bids until June 6 from Suprvs. at Waynesboro.

Miss., Jackson—Hinds County Highway Comsn., Learned Road Dist., H. D. Gibbs, Chrmn., will construct 3½ mi. road; gravel surface; concrete headwalls of culverts; bids until June 6. (See Machinery Wanted—Road Construction.)

Miss., Quitman—State Highway Comsn., Meridian, Miss., let contract to Body & Hopkins, at \$34,076, to construct 8½ mi. between De Soto and Shubuta, Miss. on Meridian-Mobile, Ala., highway.

Mo., Alton—State Highway Dept., Jefferson City, Mo., let contract to Summerfield Jones Construction Co., West Plains, to construct 5 mi. State road from Alton to State road in Howell County; and to Service Construction Co., Poplar Bluff, Mo., to construct State road from Eleven Points bridge to Ripley County line; M. S. Murray, Div. Engr., Sikeston, Mo.

Mo., Ava—State Highway Dept., Jefferson City, Mo., let contract to Summerfield Jones Construction Co., Springfield, Mo., at \$36,121, to construct 9 mi. State road from Ava Eastward and westward; Douglas County, State Aid Project No. 20,153; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo.

Mo., Carthage—State Highway Dept., Jefferson City, Mo., plans constructing 1½ mi. additional concrete road on Avilla highway; invite bids.

Mo., Cassville—State Highway Dept., Jefferson City, Mo., will construct 3.358 mi. State road from Wheaton eastward and southward; grade and construct drainage structures; Barry County, State Aid Project No. 20,134; H. P. Mobberly, Div. Engr., Springfield, Mo.; bids wanted May 24.

Mo., Chillicothe—Frank W. Ashley, Mayor, will expend \$10,000 to repave streets; bids about June 5; Jo. Braddish, City Engr. (See Machinery Wanted—Paving.)

Mo., Forsyth—State Highway Dept., Jefferson City, Mo., will construct following roads:

Taney County, 2,434 mi. State road from Forsyth southward; grade and construct drainage structures; Taney County, State Aid Project No. 20,150.

Taney County, .587 mi. State road from Forsyth to Branson; grade and construct drainage structures; Taney County, Federal Aid Project No. 163; bids opened May 17; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo. See Mch. Wanted—Road Construction.)

Mo., Ironton—State Highway Dept., Jefferson City, Mo., will construct 11.26 mi. State road from Ironton to Potosi; grade and construct drainage structures; Iron County, Federal Aid Project No. 107, Section A; H. D. Griffith, Div. Engr., De Soto, Mo.

Mo., Jefferson City—City, Richard P. Nacy, Clk., plans constructing 5945 sq. yds. concrete pavement; \$14,862.50 available; F. E. Ross, Engr.

Mo., Kansas City—City, Board of Public Works will improve following streets: 21st from Troost to Woodland; brick block pavement; Hammond Place from Cleveland to Myrtle, asphaltic concrete pavement; Michigan from 58th to 59th; 31st from Cleveland to Norton; all concrete sidewalks; W. H. Dunn, City Engr.

Mo., Lancaster—State Highway Dept., Jefferson City, let contract to Cameron & Joyce

Construction Co., Keokuk, Iowa, to construct 6 mi. State Highway from Glenwood extending east through Lancaster; Schuyler County; M. J. Hanick, Div. Engr., Howe Bldg., Macon, Mo.

Mo., Liberty—State Highway Dept., Jefferson City, Mo. For full details see Machinery Wanted—Road Construction.

Mo., Marshall—State Highway Dept., Jefferson City, Mo., let contract to J. H. Hartman, St. Joseph, Mo., at \$9,976.83, to improve Sedalia and Miami roads. S. M. Rudder, Div. Engr., Higinfritz Bldg., Sedalia, Mo.

Mo., Marshfield—State Highway Dept., Jefferson City, Mo., will construct 3.864 mi. State road from Northview westward; grade and construct drainage structures; Webster County, State Aid Project No. 20,166; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo., bids opened May 24.

Mo., Monticello—State Highway Dept., Jefferson City, Mo., will construct 1.219 mi. State road from Monticello eastward and westward; grade and construct drainage structures; Lewis County, State Aid Project No. 20,163; M. J. Hanick, Div. Engr., Howe Bldg., Macon, Mo.

Mo., St. Joseph—City, Board of Public Works, let contract to Land Construction Co., to resurface 27th St., and pave with concrete alley between 11th and 12th Sts.

Mo., St. Louis—City will pave 4 sections Broadway with granite blocks; F. A. Stiers Construction Co., at \$252,485.25, low bidder for three sections; alley between Spalding and Northland Aves. and Kingshighway and Union Boulevard; low bidder, Stiers Construction Co., at \$9,072.40. Address The Mayor.

Mo., St. Louis—City, Board of Public Service will reconstruct Carr St. from 14th to Jefferson Ave.; bids until May 23. (See Mch. Wanted—Paving.)

Mo., Trenton—State Highway Dept., Jefferson City, Mo. For full details (See Mch. Wanted—Road Construction.)

N. C., Asheville—City Comms. will pave Biltmore Ave. from Southside Ave. to Top Forest Hill, and Southside Ave. from Biltmore to Depot St.; asphalt on concrete foundation; bids until May 23.

N. C., Asheville—City, R. J. Sherrell let contract to Asheville Paving Co. to pave about 9900 sq. yds. sheet asphalt on top present concrete paving; B. M. Lee, City Engr.

N. C., Bessemer City—Town, R. C. Kennedy, Mayor, let contract to Davis-Wilcox Co., to pave principal business and residential streets; plain concrete, reinforced concrete or sheet asphalt; Mees & Mees, Conslt. Engrs., Charlotte, N. C.

N. C., Charlotte—City, Edgar Read, Clk., will construct or re-construct 5th and 6th Sts., and sidewalks; and E. Bland and W. Stonewall Sts. only; sheet asphalt surface; cement or concrete sidewalks; etc.; Southern Ry. and Seaboard Air Line Ry., to construct or re-construct with concrete cement part of E. 6th St. used by them, and 18-in. width outside tracks.

N. C., Greensboro—City, P. C. Painter, Mgr., plans paving about 25,000 sq. yds.

N. C., High Point—City plans paving Hamilton St. from Willis St. to city limits. Address The Mayor.

N. C., Jefferson—Good Roads Comsn., let contract to Turner Hartsoe Construction Co., Warrentonville, N. C. and McNeill Alhman Construction Co., Jefferson, N. C., at \$140,000, to grade and gravel surface 20 mi. roads and bridges; H. C. Tucker, Chrmn.; J. G. Bright, Engr. (See Mch. Wanted—Road Machine.)

N. C., Kenansville—North Carolina State

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Highway Comsn., Raleigh, N. C., will construct hard surface road across Duplin County, from Wayne County to Pender County lines; link of Wilmington-Goldboro; W. A. McGirt, Highway Commr.

N. C., Lumberton, Robeson County, Britts Township, will construct roads; vote on \$20,000 bonds. Address County Commrs.

N. C., Marion-McDowell County Highway Comsn. For full detail see Machinery Wanted—Road Construction.

N. C., Rockingham—Town. For full detail see Machinery Wanted—Paving.

N. C., Salisbury—Rowan County Commrs. will construct 18-ft. penetration macadam road between Salisbury and East Spencer.

N. C., Troy—Montgomery County Highway Trustees, W. B. Hicks, Chrmn., Biscoe, N. C., will construct 12 mi. top soil road; bids opened May 17; L. V. Edwards, Const. Engr., Troy, or Masonic Temple Bldg., Winston-Salem, N. C. (See Mch. Wanted—Road Construction.)

N. C., Wilmington—City, R. C. Cantwell, Commr. Public Works, plans constructing permanent street from southern line of railroad bridge to southern line of Campbell St. on 5th Ave.

N. C., Winston-Salem—North Carolina State Highway Comsn., Raleigh, N. C., will construct 2 hard surfaced roads in Forsyth County; one to Yadkin County line, from Reynolds to river; other to Davie County line, from Hanes Station to river; bids until May 25.

Okla., Alva—City contemplates paving 15 blocks in residential section; Benham Engineering Co., Const. Engr., Gumbel Bldg., Kansas City, Mo. Address The Mayor.

Okla., Chandler—Lincoln County plans constructing 3 hard surfaced highways across County; one north and south and two east and west; contemplates voting on \$750,000 bonds. Address County Commrs.

Okla., Clinton—City plans paving certain streets; Benham Engineering Co., Const. Engr., Gumbel Bldg., Kansas City, Mo. Address The Mayor.

Okla., Duncan—City plans expending about \$90,000 to construct additional paving in residence district; Benham Engineering Co., Const. Engr., Gumbel Bldg., Kansas City, Mo. Address The Mayor.

Okla., Idabel—City plans paving streets in business section; Benham Engineering Co., Const. Engr., Gumbel Bldg., Kansas City, Mo. Address The Mayor.

Okla., Kingfisher—City. For full detail see Machinery Wanted—Paving.

Okla., Madill—Marshall County plans constructing system hard-surface roads over County; may vote on bonds. Address County Commrs.

Okla., Okemah—Okfuskee County Commrs. will pave hard surface road from Okemah to Paden, through Boley.

Okla., Oklahoma City—Oklahoma County Commrs., Ed. S. Butterfield, Chrmn., will improve State roads in Sections Nos. 6, 10, 13 and 20; grade, pave and construct culverts and bridges; plain cement concrete; asphaltic concrete; rock asphalt, vertical fibre brick; bids opened May 15. (See Machinery Wanted—Road Construction.)

Okla., Tahlequah—City plans paving certain streets; Benham Engineering Co., Const. Engr., Gumbel Bldg., Kansas City, Mo. Address The Mayor.

S. C., Charleston—State Highway Dept., Columbia, S. C. For full detail see Machinery Wanted—Road Construction.

S. C., Charleston—Charleston County Sanitary and Drainage Comsn., will construct 4

mi. concrete road in St. Andrews Parish to John's Island road; 10 mi. highway from John's Island road to 21 Mile Post; plans using sand clay on Willtown road to Adams Run and on to Edisto River; bids opened May 18.

S. C., Easley—City plans paving sidewalks and streets; extend water and light lines; contemplates voting on \$75,000 bonds. Address The Mayor.

S. C., Greenville—City, Mayor Harvley, plans resurfacing streets in Eagle Park; Mills, Tindale and Eagle Aves., etc.

Tenn., Covington—City, Grant Reid, Chairman, Street Comm., let contract to M. G. Hornaday, 1261 Central ave., Memphis, Tenn., at \$28,000, to construct concrete and rock asphalt pavement; J. H. Weatherford, Engr., Porter Bldg., Memphis. (See Mch. Wanted—Paving Materials.)

Tex., Cuero—DeWitt County, J. L. Boal, County Judge, will construct 1½ mi. gravel and build concrete bridges in Road Dist. No. 4; cost \$29,000; J. G. Orby, County Engr.

Tenn., Dyersburg—City let contract to Rodes Bros., Nashville, Tenn., to pave with asphalt Cedar and Sampson Sts. Address The Mayor.

Tenn., Humboldt—City will resurface gravelled streets; voted \$20,000 bonds. Address The Mayor.

Tenn., Newport—State Highway Comsn., W. T. Testerman, Secy., Nashville, Tenn., plans constructing link of Dixie Highway through Cocke County, connecting Tennessee and North Carolina; cost \$900,000; Cocke County, Tennessee and Federal Government, each, to pay one-third.

Tennessee—State Highway Dept., Nashville, Tenn., let contracts for following:

Federal Aid Project No. 63-B, Cherokee County, grade 8.65 mi. State Highway No. 7 from Gallatin to Davidson County line; hand placed base with rock asphalt surface; to Moore Bros. & Carr, Columbia, Tenn., at \$179,694.46.

Federal Aid Project No. 65-A, Warren County, grade 6.67 mi. State Highway No. 1, from McMinnville to Cannon County line; standard hand placed base course with bituminous macadam penetration surface, to J. T. Calhoun & Co., Nashville, Tenn., at \$160,307.05.

Federal Aid Project No. 4, Bedford County, between Shelbyville and Moore County line; surface treatment; to Theo. Vogelsberg, Louisville, Ky., at \$17,561; D. Q. McComb, Ch. Engr.

Tenn., Shelbyville—State Highway Comsn., Nashville, Tenn., let contract to Theodore Vogelsberg, Louisville, Ky., at \$17,561, to construct 10 mi. road in Bedford County, from Shelbyville to Moore County line.

Tex., Angleton—Brazoria County, Angleton Road Dist., will construct hard surface roads from Angleton to Houston, Freeport, Danbury and West Columbia; voted \$220,000 bonds; C. D. Jessup, County Judge; W. A. Randle, County Engr.

Tex., Ballinger—U. S. Bureau Public Roads, Washington, D. C., approved plans to construct 9.9 mi. 18-ft. gravel surfaced road on State Highway No. 30; Runnels County, Federal Aid Proj. No. 65,310; O. L. Parish, County Judge; U. Stephens, County Engr.

Tex., Brownsville—Cameron County let contract to Dobbs & Wedegartner, San Benito, Tex., at \$5000, to construct 1380 sq. yds. reinforced concrete pavement; State Aid Project No. 54, Sec. E; O. C. Dancy, County Judge; W. O. Washington, County Engr.

Tex., Cameron—Milam County will construct 17.9 mi. State Highway No. 36; gravel and selust surface; cost \$110,000; W. C.

Gillis, County Judge; A. F. Mitchell, County Engr.

Tex., Ennis—City, will pave streets; vote June 20 on \$75,000 bonds. Address The Mayor.

Tex., Georgetown—Ch. Engr., U. S. Bureau, Washington, D. C., approved plans to construct 5.89 mi. State Highway No. 2 in Williams County from Liberty Hill to Burnet County line; cost \$38,172; Federal Aid Project No. 257; construct 5.4 mi. 16-ft. gravel bituminous State Highway No. 2 from Hutto, Tex., to Hutto Precinct line; cost \$73,932; Federal Aid Project No. 256; P. D. Love, County Judge; R. A. Nichols, County Engr.

Tex., Glen Rose—Somervill County Court, R. L. Bryan, County Judge, let contract to McCullum Construction Co., Fort Worth, Tex., to construct 3.91 mi. State Highways Nos. 25 and 10-A from Glen Rose to Brazos River; Henry J. Cox, County Engr.

Tex., Groesbeck—State Highway Comsn., Austin, Tex., and Federal Government will construct Mexia-Waco road from Tehuacana to County line; bids opened May 16; cost about \$100,000; State Highway Comsn., to pay \$25,000, and Federal Government \$25,000; balance by subscription.

Tex., Henrietta—Clay County votes May 13 on \$160,000 road district bonds. Address County Commrs.

Tex., Houston—City, O. F. Holcombe, Mayor. For full detail see Mch. Wanted—Viaduct Construction.

Tex., Jefferson—Marion County, E. B. Lewis, County Judge, plans constructing road from Jefferson to Harris County line; iron ore gravel surfacing; concrete drainage structures; T. B. Warden, County Engr. (See Mch. Wanted—Paving Equipment.)

Tex., Johnson City—Blanco County let contract to Holt & Rubys, Buda, Tex., at \$30,000, to construct 7.4 mi. State Highway No. 46 from Comal County line north; Wm. C. Yeager, County Engr., Blanco.

Tex., Linden—State Highway Dept., Austin, Tex., let contract to construct highway from Atlanta to Queen City, connecting Texarkana pike.

Tex., Orange—Orange Plank Road, capital \$60,000, inceptd. by S. M. White, J. O. Sims and B. F. Brown; plans constructing 6 mi. plank road from Cow bayou to point on Adams road.

Tex., Richmond—Fort Bend County plans constructing 7.17 mi. 12-ft. shell surfaced road on State Highway No. 12; C. D. Meyers, County Judge; Nagle-Witt-Rollins Engineering Co., Engr., Dallas, Tex.

Tex., Robstown—City, John W. Kellam, Mayor. For full detail see Mch. Wanted—Paving.

Tex., San Antonio—City will re-surface Dewey Place and Josephine St.; D. D. Harrigan, City Engr.

Tex., San Antonio—City Comsn. plans paving Pine and Lamar Sts.; received bids for paving Herff, Dashiell and W. Mistletoe Sts.

Tex., Sherman—City votes May 12 on \$50,000 street paving bonds. Address The Mayor.

Tex., Waco—McLennan County, J. P. Lester, County Judge, will construct 10.57 mi. State Highway No. 7; 20,818 cu. yds. gravel surface; bids opened May 16; Mantan Hannah, County Engr. (See Mch. Wanted—Road Construction.)

Tex., Waco—U. S. Bureau Public Roads, approved plans to construct 6 mi. Waco-Dallas Highway in McLennan County from Elm Mott north; gravel surface; bituminous top; 15-ft. wide; cost \$11,500; Federal Aid Project No. 139; also construct 10.6 mi. Meridian

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Highway in McLennan County; 15-ft. gravel; cost \$96,625; Federal Aid Project No. 265; Manton Hannah, County Engr.; J. P. Lester, County Judge.

Va., Alexandria—State Highway Comsn., Richmond Va., will construct 11.32 mi. 16-ft. road on Route No. 6 from Alexandria to Fairfax Courthouse, in Fairfax County; low bidder, J. E. Lane & Co., Alta Vista; G. P. Coleman, Commr.

Va., Gate City—Scott County Board of Suprs., will grade and drain five sections of road. (For full details see Mch. Wanted—Road Construction.)

Va., Isle of Wight—State Highway Comsn., Richmond, Va., plans constructing 10 mi. concrete road from Carrsville to Franklin; complete 93 mi. improved highway from Virginia Beach to Richmond; Norfolk asked to loan \$250,000 for work.

Va., Lynchburg—City will widen Church St. sidewalk; pave Easton and Euclid Aves. Address City Mgr.

Va., Lynchburg—City, will improve concrete sidewalks on Dearing St., Garfield, and Rivermont Aves.; bids opened May 13. (See Machinery Wanted—Paving.)

Va., Washington—State Highway Comsn., Richmond, Va. will construct road from Sperryville to New Market, through Luray; Route 21; section of Lee Highway extending from Washington to New Orleans; \$100,000 available.

W. Va., Berkeley Springs—Morgan County Court, M. S. Harnison, Clk. For full detail see Mch. Wanted—Road Construction.

W. Va., Charleston—City, Bonner H. Hill, Mgr., will construct 40,000 sq. yds. paving in several streets; bids opened; Ernest Bruce, City Engr.

W. Va., Charleston—Kanawha County will construct and improve county-district roads in Malden Dist.; votes June 3 on \$90,000 bonds. Address County Comrs.

W. Va., Huntington—City, C. F. Templeton, City Auditor, will resurface city boulevards; build concrete bridge.

W. Va., Princeton—State Road Comsn., Charleston, W. Va., will rebuild 2½ mi. Bramwell road over Pinnacle Hill.

W. Va., Ronceverte—City, P. A. George, Paving.

W. Va., Welch—McDowell County Court, Big Creek Dist., will construct 35 mi. road from Welch to Virginia State line; voted \$450,000 bonds.

Sewer Construction.

Ark., Lepanto—City opens bids June 1 to construct water and sewer system, cost \$64,000; Gaines & Carlisle, 206 Falls Bldg., Memphis, Tenn., Engr.

Fla., Coconut Grove—City votes June 1 on \$120,000 bonds including \$10,000 for town building, \$10,000 for installing septic tank and purchase equipment for disposal of sewage, \$60,000 for purchase and improvement of land, \$30,000 for constructing streets, etc., \$10,000 installation of poles, etc. for street lighting system.

Fla., Eustis—City will construct sewer system and improve streets; voted \$200,000 sewer bonds; \$90,000 street bonds. Address The Mayor.

Fla., Miami—City will expend \$214,000 for sewer construction. Address The Mayor.

Fla., West Palm Beach—City, Karl Ridder, Mgr., let contract at \$30,645 to Hanberry Construction Co., Miami, to construct sewers in Dist. No. 3 and at \$18,692 to L. E. Michler, to construct sewers in Dist. No. 4.

Fla., Winter Haven—City voted \$135,000 bonds for street paving, \$65,000 for sewers,

\$10,000 for white way, \$45,000 for city hall. Address The Mayor.

Ga., Atlanta—For full details see Mch. Wanted—Sewer Construction.

Ga., Albany—City, H. W. Coleman Dir. of Public Works, will construct sanitary sewers on various streets, estimated quantities of terra cotta sewer pipe as follows: 2000 lin. ft. of 27-in., 540 lin. ft. of 12-in., 800 lin. ft. of 10-in., 2100 lin. ft. of 8-in.; 17 Standard manholes, 3 flush tanks; bids opened May 15. (See Machinery Wanted—Sewer Construction.)

Ga., West Point—City, J. A. Avary, Mayor, will remodel and repair sewers, water works and lighting plant; vote May 24 on \$25,000 bonds.

Ky., Ashland—For full details see Mch. Wanted—Sewer Construction.

Miss., Durant—City will improve sewers; voted \$20,000 bonds. Address The Mayor.

Ky., Louisville—For full details (See Mch. Wanted—Sewer Construction.)

Ky., Paducah—For full details (See Mch. Wanted—Sewer Construction.)

La., Bossier City—R. T. Eatman, Clerk, let general contract at \$34,954 to McCaim Bros., Shreveport, La., for water works; E. T. Archer & Co., 612 New England Bldg., Kansas City, Mo., Engr.

Md., Federalsburg—Town, R. W. Messenger, Clerk, having preliminary plans by Kasthuber & Anderson, Dover St., Easton, Md., Engr. for sewer.

Mo., Eldon—City, E. T. Collins, Clerk, will construct water and sewer system; votes May 22 on \$88,000 bonds; E. T. Archer & Co., 612 New England Bldg., Kansas City, Mo., Engrs. (Lately noted.)

Mo., St. Louis—Hogan Contracting Co., was lowest bidder at \$19,543.90, for constructing Oakland Ave. Sewer Dist. No. 2. (Lately noted.)

Okla., Burbank—City, Geo. Sheel, Chrmn., will construct sewer system; voted \$10,000 bonds; J. H. Buckle, Engr. (See Machinery Wanted—Sewer Construction.)

Okla., Purcell—City will extend sewer and water works system; also paving; plans voting on bonds; estimated cost \$250,000; Benham Engineering Co., Kansas City, Mo., Consulting Engineer.

Okla., Shroud—City will construct sanitary main sewers and sewage disposal plant; probably vote on bonds; estimated cost \$100,000; Benham Engineering Co., Kansas City, Mo., Consit. Engr.

Okla., Tulsa—For full details (See Mch. Wanted—Sewer Construction.)

Okla., Tulsa—City, Roy Garbett, will construct sanitary sewer, including laterals, connections, etc.; bids until May 15. (See Mch. Wanted—Sewer Construction.)

S. C., Greenville—For full details (See Water Works.)

Tex., Center—For full details (See Mch. Wanted—Sewer and Water Construction.)

Tex., Clarksville—City, John M. Butcher, Mayor, improve sewerage disposal plant.

Tex., Electra—For full details (See Mch. Wanted—Water Works.)

Tex., Ennis—City will extend sewer and water system; vote June 20 on \$30,000 bonds. Address The Mayor.

Tex., Houston—City, J. C. McVea, Engr., recommend construction of storm sewer from Polk Ave. to Slaughter Pen Bayou; cost \$40,000.

Tex., Lamesa—City construct sewer system; voted \$35,000 bonds. Address The Mayor.

Va., Potomac—Town, J. W. Varney, Mayor, will construct sanitary sewers; approx. 30,000 cu. yds. of trench excavation.

36,000 lin. ft. 8-in. sewers, 500 lin. ft. 10-in., 4000 lin. ft. 12-in., 700 8-in. x 6 in. Y branch house connections and 85 manholes; bids until May 18; David J. Howell & Son, Union Trust Bldg., Washington, D. C., Engrs. (See Machinery Wanted—Sewer Construction.)

Tex., Robstown—For fuller details (See Mch. Wanted—Sewer Construction.)

Va., South Norfolk—City, F. L. Rowland, Mayor, let contract to Dashiell Rolly, Portsmouth, for sanitary sewers.

W. Va., Fairmont—City, W. W. Conway, Mayor, construct sanitary sewer in Ravine Park, 600 ft. 20-in. cast iron pipe; S. B. Miller, City Engr. (Lately noted.)

W. Va., Mannington—City, A. B. Baumann, Sewer Commr. will extend sanitary system in Homewood.

W. Va., Ronceverte—For full details (See Mch. Wanted—Sewer Construction.)

Telephone Systems.

Ala., Tuscaloosa—University of Alabama, Dr. George H. Denny, Prest., install radio broadcasting station with transmission radius covering entire state; contract also includes delivery of 200 receiving sets to be used by city and county high schools.

Ky., Louisville—Louisville Home Telephone Co., 523 5th Ave., erect 2-story, 40x60-ft. exchange on Magnolia St.; bids open; Nevin, Wischmeyer & Morgan, Archts., 1317 Starks Bldg.

Mo., Pleasant Hill—Cass County Telephone Co. contemplates establishing exchange building, purchased site on Cedar St.

Okla., Weatherford—Deer Creek Valley Telephone Co., ineptd. by W. H. Wasman, Elmer Green and G. W. Powers.

Textile Mills.

N. C., Rockingham—Roberdel Mfg. Co. let general contract to T. C. Thompson, 609 N. Smith St., Charlotte, N. C. for one story addition to plant; Robert & Co., Atlanta, Archt.

S. C., Lockhart—Lockhart Mill will install electric drive in place of waterpower.

Water Works.

Ark., Lepanto—For fuller details (See Sewer Construction.)

Fla., Jacksonville—City Comsn., Frank H. Owen, Chrmn., will construct two circular concrete aerating basins and concrete slab cover over existing aerating basin; bids May 25. (See Machinery Wanted—Water Works.)

Fla., Seabreeze—(For full details see Machinery Wanted—Water Works.)

Fla., Tampa—Tampa Water Works Co., Edw. R. Wood, Jr., Prest., plans \$50,000 improvements to plant; city may later vote bonds for purchase of plant.

Fla., West Palm Beach—City will purchase high pressure water system for fire protection; votes June 6 on \$100,000 bonds. Address The Mayor.

Ga., Atlanta—City will lay water pipe on various streets, 6, 12, 16 in. pipes; cost about \$39,421, Frank N. Inman, Bond Commission.

Ga., West Point—City, J. A. Avary, Mayor, will remodel and repair water works, lighting plant and sewerage system; votes May 24 on \$25,000 bonds.

Miss., Durant—City, D. V. Pound, Mayor, will expend \$80,000 for sewer and water improvements, cost \$80,000; plans not completed; install pumps and electric unit; capacity 100,000 gals.; M. L. Culley, Jackson, Miss., City Engr., construction bids opened June 1.

Miss., Durant—City will install water

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

works and improve sewerage; voted \$50,000 bonds for water, \$20,000 for sewers. Address The Mayor.

Mo., Elden—For full details (See Sewer Construction.)

Mo., St. Joseph—City construct water works; voted \$795,000 bonds. Address The Mayor.

N. C., Bessemer City—City will extend water system. Address The Mayor.

N. C., Mebane—For full details see Machinery Wanted—Water Works.

N. C., Wilmington—City, R. C. Cantwell, Commr. of Public Works, will expend about \$150,000 for extensions to water works, including 2 miles of 36-in. pipe line and river crossing 40 ft. under Cape Fear River; construct intake, date of opening bids not decided. Lately noted. Carolina Engineering Co., 412 Southern Bldg., Wilmington, N. C., Engrs. (See Mch. Wanted—Water Works.)

Okl., Bristow—City improve water works, drill 3 wells, construct standpipe, install 250,000 surplus reservoir; V. V. Long, Oklahoma City, Engr. (Lately noted.)

Okl., Burbank—City, Geo. Sheef, Chmn., will construct water, sewer and light plant; voted \$51,000 bonds; J. M. Buckley, Engr. (See Machinery Wanted—Water Equipment.)

Okl., Fairland—City voted \$43,500 water and light bonds. Address The Mayor.

Okl., Idabel—City will construct pumping and filtration plant; estimated cost \$150,000; Benham Engineering Co., Kansas City, Mo., Consit. Engr.

Okl., Oklahoma City—For full details (See Mch. Wanted Water Works.)

Okl., Oklahoma City—City, B. M. Hart, City Engr., let following contracts for iron pipes, etc., for water distribution system; United States Co., for Bell and Spigot pipe at \$202,406; N. S. Sherman Machine & Iron Works, at \$12,187.50, for special fittings for pipe and \$870 for valve castings; Darling Valve & Mfg. Co., at \$22,154.70 for hydrants and valves.

Okl., Purcell—For full details (See Sewer Construction.)

Okl., Vinita—For fuller details see Machinery Wanted—Water Works.

Okl., Wewoka—City is having plans prepared by Benham Engineering Co., Kansas City, Mo., Consit. Engr. for water supply and filtration plant; bids invited soon.

S. C., Easley—City, G. W. Allen, Mayor, will extend water and light system; vote on \$75,000 bonds for streets, water and light; S. H. Bowen, Engr.

S. C., Florence—City plans improvements to water works and supply system; Nesbit Winfield, Consit. Engr.

Tenn., Germantown—City construct water and electric light plant; J. A. Arthur, Engr. (Lately noted.)

S. C., Greenville—City will improve water works and extend sewers; votes June 6 on \$400,000 bonds; G. G. Wells, City Clerk.

Tex., Center—For full details (See Mch. Wanted—Sewer and Water Construction.)

Tex., Electra—City improve water works and sewer system; approved \$80,000 water works bonds, \$20,000 for sewers. Address The Mayor.

Tex., Ennis—City will extend water and sewer system; vote June 20 on \$30,000 bonds. Address The Mayor.

Tex., Jacksonville—City let contracts for water works as follows: E. P. McElrath of Corsicana, at \$40,363 for Contract No. 1. Robt. C. Newcomb, Dallas, at \$29,994. United States Cast Iron Co., Dallas Darling Valve Mfg. Co., Williamsport, Pa., Briggs

Weaver Mfg. Co., Dallas, Maury & Maury, Dallas, Des Moines Steel Co., Pittsburgh, Pa.

Tex., Lamesa—City will improve water works voted \$65,000 water works bonds. Address The Mayor.

Tex., Marlin—City let contract to Chicago Bridge & Iron Co., at \$7640 to erect tower and tank; 150,000 gal. capacity.

Tex., McAllen—L. D. Crawford has contract to construct reservoir for Hidalgo Irrigation Dist., No. 3, construction begun.

Tex., San Antonio—M. H. White Co. will construct 500,000 gal. elevated tank for water works in connection with development of subdivision; construct streets; install electric lights.

Va., Norfolk—City, Chas. M. Ashburner, Mgr., let contract for submerged pipe across Elizabeth River from Craney Island to Lamberts Point filter station to Fred Jones Dredging Co., at 48c. a yd. for dredging, for laying pipe, to Sanford & Brooks, at \$14.50 a ft.; entire cost about \$60,000.

Va., Richmond—E. W. Trafford, Director of Utilities, let contract for excavation work necessary in construction of water and gas mains; Claiborne & Taylor, contract for excavating and laying water pipes for Beverly and Mulberry Sts. to Sixth and Main Sts.; cost \$24,184; for excavation for gas mains from More St. holder to Belvidere and Cary St.; cost \$3818; for furnishing pipe and castings to Glemorgan Pipe & Foundry Co., Lynchburg, at \$3258. (Lately noted.)

W. Va., Fairmont—City may expend \$1,000,000 for water supply system; J. Clyde Morris, Water Commr.

Woodworking Plants.

Ark., Conway—Staves—J. G. Optiz, Benton, Ark., reported to establish stave man., capacity 4 to 5 cars weekly.

D. C., Washington—Talking Machines—Associated Talking Machine Co., capital \$250,000, inceptd. by W. L. Palmer, H. L. McLeod and F. S. Packard, Jr.

Fla., Marianna—Veneer—Chipola Veneer Co., capital \$15,000, inceptd. with A. C. Wetmore, Prest., Plymouth, Ind.; F. R. Simpson, Treas., Marianna.

La., Baton Rouge—Furniture—Standard Furniture Co., capital \$12,000, inceptd. with Isidor Mayer, Prest.; P. A. Richardson, Secy.-Treas.

Md., Hagerstown—Wooden Pins—Lewis H. Wiebel will rebuild wooden pin factory. (Lately noted burned at loss of \$25,000.)

Mo., St. Louis—Office Fixtures—Washington Fixture Co., capital \$30,000, inceptd. by I. Eisenstein, W. D. & Edna Ellinger; mfr. office fixtures, equipment, etc.

S. C., Newberry—Mill Work—Newberry Lumber Co., J. E. Summer, Mgr., will erect planing mill, machine shop, warehouse, offices, etc.; construction by owners; general mill work.

Tenn., Gatlinburg, P. O. Sevierville—School Desks, etc.—Sevier County Mfg. Co., capital \$10,000, inceptd. with D. C. Swabb, Prest., Middlesboro, Tenn.; Wilbur Creswell, Secy.-Treas., Gatlinburg; has plant, will install additional equipment; mfr. school desks, supplies, etc.

Tenn., Memphis—Crates—American Box Co., W. M. Brockenbrough, Secy., Lynchburg, Va., plans erecting \$50,000 plant, mfr. crates; purchased 6½ acre site.

Tenn., Nashville—Furniture—Chicago Furniture Co., Louis Albert, Prest., Chicago, Ill., plans establishing plant; probably acquire E. & N. Mfg. Co.'s plant.

Tex., Austin—Woodworking—Woodward Mfg. Co. plans rebuilding plant; damaged by tonado, at loss of \$400,000.

Tex., Beaumont—Handles—Gulf Coast Machine & Supply Co., J. D. Butler, Prest., purchased plant of Gates Handle Co.

FIRE DAMAGE

Ala., Birmingham—Markstein Bros.' building at 2105 First Ave., S. Fellheimer, Resident Mgr.; loss about \$165,000.

Fla., West Palm Beach—D. F. Dunkle's business block at Rosemary St. and First Ave.; Jno. Williams' building; Bob Saunders' dwellings.

Ga., Trenton—Dock Stephens & Son's store.

Ga., Rutledge—Rutledge Oil Mill, owned by Stanton & Wofford, Social Circle; loss \$150,000.

Ky., Lexington—Johnson N. Camden and J. C. Millam's stables.

La., McGehee—F. M. Havers's garage, two brick buildings owned by Scott McGehee estate; total loss \$30,000.

La., New Orleans—Crescent Billiard Hall at Canal and Charles Sts., owned by Mrs. Walter Mehl, 1329 St. Charles Ave.

Md., Baltimore—Pier 8 of The Canton Co.; loss not estimated.

Miss., Sanatorium—State Tuberculosis Sanatorium's power plant, tank and laundry; loss \$16,000. Address The Supt.

N. C., Asheville—Leader Department Store, S. I. Bloomberg, Prop.; loss \$55,000.

N. C., Reeds, P. O. Lexington—Roller mill, owned by Harvey Myers and Ed. Hill; loss \$12,000.

Okl., Chickasha—New Chickasha Hotel, 124 Chickasha Ave., owned by J. L. Burt-schl; loss \$60,000.

Okl., Chickasha—Wachita Valley Broom Corn Storage Co.'s building; loss \$75,000; Geo. J. Line, Mgr.

Tenn., Summerville—C. A. Oliver & Co.'s garage and other buildings; loss \$50,000.

Tex., Beaumont—I. J. Ableman & Co.'s store.

Tex., Fort Worth—Drumm Seed & Floral Co.'s building.

Tex., Lamesa—Lowry & Clark's drug store, H. E. Williams' store; Holloway & Dixon's building.

Tex., Olton—Lamb County Courthouse; loss about \$10,000. Address County Commrs.

Va., Cedar Bluff—Cedar Bluff Woolen Mills Co.'s plant; loss \$30,000.

Va., Portsmouth—A. H. Goodman & Bro.'s department store, High and Eflingham Sts.; loss \$30,000.

W. Va., Fairmont—B. Layman & Sons Garage, A. B. Knight's machine shop; total loss \$72,000.

W. Va., Middlebourne—City's water plant; Address The Mayor.

Damaged by Explosion.

Tex., Fort Worth—Turner & Dingee's store, 502 Houston St.; loss \$40,000 to \$50,000.

Damaged by Storm.

Tex., Austin—Holy Cross dormitory at St. Edward's College; loss \$250,000; State School for negro deaf, dumb and blind; loss \$40,000.

Tex., Penfield, P. O. Austin—Woodward Mfg. Co.'s woodworking plant; loss \$400,000.

BUILDING NEWS

BUILDINGS PROPOSED

Apartment Houses.

Ark., Fort Smith—Mrs. Coedelia Lowery will erect apartment house at N. 6th and E. Sts.; cost \$15,000.

Ark., Little Rock—Dr. R. H. Gillespie of Pine Bluff will erect apartment house at 15th and Arch Sts.; cost \$15,000; Mitchell Selligman, Archt.

Fla., Jacksonville—C. E. Hillyer will erect apartment house on Challen Ave.; cost \$26,000; 34x75 ft.; hollow tile and stucco; built-up roof; hardwood floors; hollow fireproof and interior tile; steam heat, \$2000; electric lights; plans and construction by owner. (Lately noted.)

Fla., Miami—M. Williamson, 904 Collins Ave., plans to erect apartment house, Collins Ave. and 9th St.; cost \$35,000; 11 apartments.

Fla., Miami—Wm. B. Risbeck, Donora, Pa., plans to erect apartment house on S. E. Miami Rd.; 50x150 ft.

Fla., Miami—M. J. Roughan will erect apartment house at 313-315 Washington Ave.; cost \$24,500; 3 stories; concrete block.

Ga., Atlanta—O. Whitmire will erect apartment house on Lee St., near Oak St.; brick veneer; limestone trim; oak floors; tile baths; steam heat; 4 apartments of five rooms and porch; A. Ten Eyck Brown and Alfredo Barilli, Jr., Asso. Archts.

La., Shreveport—Miss Roberta F. Moore will erect apartment house on Kings Highway; cost \$12,000.

Md., Baltimore—Frank B. Bready, 503 Liberty Heights Ave., will erect Forest Courts Apartments at Liberty Heights and Garrison Aves.; cost \$125,000; 100x70 ft.; brick; 3 stories; Carey roof; steam heat; drug store on first floor 25 apartments of 1 room and bath and 5 rooms and bath; John R. Forsythe, Archt., 232 St. Paul St.; construction by owner. (Lately noted.)

Mo., Kansas City—D. L. Kelley will erect 2-story brick apartment houses at 2715-2717-2719 Robert Gillham Rd.; cost \$15,000 each.

Tenn., Knoxville—Dr. L. A. Hann will erect brick addition to Caldwell Apts., 408-10 Main St.; cost \$14,000.

Tenn., Knoxville—Earl Worsham will erect 3-story apartment house at 1528 W. Cumberland Ave.; cost \$60,000.

Tex., El Paso—W. S. Birney will erect apartment house in block 67, Satterthwaite's addition; cost \$41,000.

Tex., San Antonio—J. M. Booth will erect apartment house at Austin and 10th Sts.; store on first floor; 24 rooms on second; cost about \$20,000; Beverly W. Spillman, Archt.

Tex., San Antonio—J. C. Kelly Lumber Co., 321 Hicks Bldg., is receiving bids for carpenter and labor work on 32-room apartment house on N. 6th St.

Va., Bristol—Bristol Apartment Corp., T. W. Preston, E. H. Kabler and others, will erect apartment houses.

Va., Norfolk—Philip B. Moser and Erwin C. Gutzwiller, Archts., are preparing plans for one 24-family and one 12-family apartment house on W. Ghent Blvd.; also 24-family brick apartment house in Graydon Park.

Va., Richmond—Willis Company, Inc., Joseph N. Willis, Pres., P. O. Box 134, will erect 64-family apartment building at Richmond and 5 dwellings at Norfolk; cost about

\$175,000; ordinary construction; Linder & Phillips, archts. for apartment house; bids opened July 1; J. N. W. Pater, Norfolk, archt. for dwellings; bids opened.

Association and Fraternal.

Fla., Fort Pierce—Stephen N. Gladwin Post No. 40, American Legion, will erect building.

Ga., Waycross—Waycross District Shrine, R. Scully, Secy., will erect temple.

Ky., Bulan—Trace Fork Mining Co., will erect Y. M. C. A. building. (See Dwellings.)

Ky., Montago—Meems-Haskins Coal Co. will erect Y. M. C. A. building. (See Schools.)

N. C., Raleigh—Independent Order of Odd Fellows will erect lodge and office building at Hargett and Salisbury Sts.; fireproof.

Tenn., Morristown—Ancient Free and Accepted Masons will erect temple; cost about \$50,000; 60x140 ft.; 3 stories and basement; brick and terra cotta; composition roof; hardwood floors; steam heat; electric lights; A. B. Baumann and A. B. Baumann, Jr., Archts., 813½ E. Market St., Knoxville; bids opened about May 25. Address Hugh Mims, Morristown. (Lately noted.)

Va., Alexandria—Young Mens Christian Assn. plans to erect building; \$80,000 available.

Bank and Office.

Ala., Montgomery—Fourth National Bank will erect building on Commerce St.; cost \$150,000; Carl B. Cooper, Archt.

Ark., Blytheville—Anderson & Crahn, City Drug Store, will erect office building on 2nd St.; 45x100 ft.; reinforced concrete and tile; Claud Northern, Archt.

Ark., Magnolia—Farmers Bank & Trust Co., T. S. Grayson, Pres., will remodel building; cost about \$15,000; 25x100 ft.; brick and plaster; tile and yellow pine floor; steam heat; electric lights; vaults; Witt, Selbert & Halsey, Archts., Texarkana, Ark.-Tex.; St. Louis Bank Equipment & Fixture Co., St. Louis, Contr. for fixtures; bids opened Address Mr. Grayson. (Lately noted.)

D. C., Washington—F. M. Johnson, 1731 K St., N.W., will enlarge building.

Mo., Cape Girardeau—Farmers & Merchants Bank will erect building; cost \$50,000; R. W. Knox, Archt.; bids opened; separate bids for heating and plumbing.

Mo., Kansas City—W. B. Henderson, Victor Bldg., will erect office building at 920 McGee St.; 1 story and basement; 24x115 ft.; brick; stone trim; Keene & Simpson, Archts., 400 Reliance Bldg.

N. C., Oxford—A. A. Hicks will erect office building.

Tenn., Nashville—Farmers & Merchants Bank, A. E. Potter, Pres., will remodel bldg. on 3rd Ave.; white stone front; bronze doorways; marble floors and wainscoting; directors' and ladies' rest room on mezzanine floor; 3 vaults; Marr & Holman, Archts.

Tex., Houston—Majestic Realty Co. will erect 6-story office building at Milan St. and Texas Ave.

Tex., Waco—Liberty National Bank, John Wright, Pres., plans to erect building at 6th and Austin Sts.; probably 8 to 12 stories.

Churches.

Ark., Pine Bluff—First Christian Church,

A. W. Sweatt, Chrmn. Bldg. Comm., will erect building at 6th and Laurel Sts.; cost \$60,000; 60x100 ft.; brick and stone; composition roof; pine floors; city lights; Mitchell Selligman, Archts.; bids opened. (Lately noted.)

Fla., Clearwater—St. Mathews First Baptist Church, Rev. M. L. Cherry, Pastor, will erect building; cost \$35,000; 60x100 ft.; ordinary construction; asbestos shingle roof; pine floors; steam heat; electric lights; address W. A. Rayfield & Co., Archts., Birmingham, Ala.; bids opened June 1.

Fla., Orlando—First Baptist Church will erect building and enlarge present structure; cost about \$30,000; also erect parsonage. Address The Pastor.

Fla., Palmetto—Methodist Episcopal Church will erect building; cost complete about \$60,000; 3 stories; face brick; stone trim; Denison interlocking tile walls; Spanish tile roof; steel roof trusses; steam heat; auditorium to seat 600, 20 class rooms, dining room, kitchen, pastor's study, choir-room; pipe-organ; Johnson & Fonda, Archts., Bradentown; ready for bids.

Fla., Tampa—House of Prayer Episcopal Church, Dr. Wm. C. Richardson, Rector, will erect building at Central and Michigan Aves.

Ga., Macon—Tabernacle Baptist Church, Rev. Grady B. Fagan, Pastor, will erect auditorium; cost \$40,000; O. H. Baldwin, Archt., Anderson, S. C.

Ky., Bulan—Trace Fork Mining Co., will erect church. (See Dwellings.)

Ky., Montago—Meems-Haskins Coal Co. will erect church building. (See Schools.)

Md., Baltimore—Huntington Ave. Baptist Church, Rev. L. Judson Westphal, Pastor, will erect building; cost \$40,000; 2 stories and basement; brick; limestone trim; auditorium to seat 600; H. L. Cain, Archt., Richmond, Va.; bids opened May 25. (Lately noted.)

Miss., Senatobia—Methodist Church, Herbert Holmes, Chrmn. Bldg. Comm., will erect Sunday school annex; 2 stories and basement.

Mo., Kansas City—St. Vincent's Church, Rev. F. X. McCabe, Pastor, will erect parish house at 31st St. and Flora Ave.; Gothic architecture; walls of texture plaster; Bedford limestone trim; broken ashlar; auditorium to seat 800; chapel in basement to accommodate 200; Maurice Carroll, Archt., 3117 Flora Ave.; A. C. Martin, Asso. Archt., Los Angeles.

Mo., Liberty—Baptist Church, Rev. O. R. Mangum, Pastor, will receive bids until May 26 to furnish all material and labor to construct church; separate bids for heating, plumbing and electric wiring; plans and specifications from J. H. Felt & Co., Archts., 800 Grand Ave.; Temples Bldg., Kansas City.

Mo., Maywood—Maywood Methodist Episcopal Church will erect \$60,000 building. Address The Pastor.

Mo., Silcox—Presbyterian Church, Rev. C. B. Yeargan, Pastor, will erect \$10,000 brick building.

Mo., Springfield—Central Christian Church plans to erect \$60,000 building or remodel present structure. Address The Pastor.

N. C., Pinetops—Board of Church Extension, M. E. Church, South, Louisville, Ky., will erect building; cost about \$10,000; brick veneer; slate or metal shingle roof; hardwood floors; city lights; plans by owner. Address W. L. Dunn, Chrmn. Bldg. Comm., Pinetops.

N. C., Rutherfordton—First Baptist Church, M. L. Edwards, Secy. Bldg. Comm., will erect building; cost \$30,000; 36 rooms;

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

capacity 800; brick; tile roof; concrete and hardwood floors; metal ceilings; rolling partitions; ventilators; steel sash and trim; hot air heat; electric lights; J. E. Greene, Archt., Birmingham, Ala.; contract let about June 1. Address Mr. Edwards. (Latey noted.)

Okla., Oklahoma City—Centenary Methodist Church, Rev. J. W. Miller, Pastor, will erect building at 13th St. and Kate Ave.; cost about \$21,000; brick and stone.

Tenn., Knoxville—First Baptist Church, Joseph P. Gaunt, Chrmn. Bldg. Comm., and W. M. Edgerton, Secy., will erect building at W. Main Ave. and Walnut St.; cost \$230,000; is holding competition under rules of American Institute of Architects and will receive plans on May 22; following architects were invited to submit plans: Barber & McMurray, Knoxville; Edward Daugherty, Nashville; Peebles & Ferguson, Norfolk, Va.; Waddy B. Wood, Washington, D. C.; Sill, Buckler & Penhagen, 11 E. Pleasant St., Baltimore, Md. (Previously noted.)

Tenn., Knoxville—First Presbyterian Church will erect building; cost about \$30,000; 63x92 ft.; 1 story and basement; brick; stone trim; asphalt or slate roof; pine floors; steam heat; electric lights; A. B. Baumann and A. B. Baumann, Jr., Archts., 813½ E. Market St.; bids opened. (Latey noted.)

Tenn., Sevierville—Baptist Church will erect \$50,000 building; auditorium to seat 850 to 1000. Address The Pastor.

Tex., Beaumont—First Baptist Church will erect building at Pearl and Forsythe Sts.; cost over \$150,000; roof garden; dining room to accommodate 500 in basement. Address The Pastor.

Tex., Dallas—Riggs' Memorial Church, Greenville Ave. and Oram St., Rev. Walter C. Scott, supply Pastor. Southern Methodist University, will erect building; cost about \$10,000; frame.

Tex., San Antonio—First Presbyterian Church, Dr. P. B. Hill, Pastor, will erect Sunday school building at Ave. D. and 4th St.; cost about \$100,000.

Tex., Stephenville—Baptist Church, Rev. S. B. Culpepper, Pastor, will erect building; cost about \$50,000; brick 25 classrooms; auditorium to seat 1500.

W. Va., Huntington—St. Paul's Lutheran Church, Rev. C. E. Butler, Pastor, plans to erect building.

W. Va., Huntington—Orthodox Jews will erect synagogue; cost \$25,000 to \$35,000. Address The Rabbi.

W. Va., Huntington—St. Paul's Lutheran Church will erect building. Address The Pastor.

W. Va., Rivesville—Methodist Episcopal Church, South plans to erect addition to building on Jasper St. Address The Pastor.

City and County.

Ala., Birmingham—Fire Station—City Commrs., D. E. McLendon, Prest., will erect brick bungalow type fire station on 30th Ave. and 26th St., North Birmingham; Warren & Knight, Archts. (Latey noted.)

Ala., Tuscaloosa—Fire Station—City Commn., will erect fire station on 7th St., between 25th and 26th Sts.; cost \$12,000; 63x36 ft.; 2 stories; wire cut brick; limestone trim; steam heat; shower baths; lockers, lounge rooms, sleeping porch, 18x36 ft., etc.; D. O. Whildin, Archt., Birmingham. (Previously noted.)

Fla., Coconut Grove—City Hall—City, Hugh M. Matheson, Mayor, will vote June 1 on bonds to include \$10,000 for city hall.

Fla., West Palm Beach—Fire Station, Etc.

—City, Mr. Biggers, Mayor, will vote June 6 on \$125,000 bonds; including \$100,000 to equip and maintain fire department, \$15,000 for water front and \$10,000 for building and repairing public buildings.

Ky., Whitesburg—Jail—Board of County Commrs. of Letcher County will erect jail; contract let May 15.

Miss., Jackson—Auditorium, etc.—City Commissioners called election June 3 on \$90,000 bonds to erect auditorium and \$35,000 for schools.

N. C., High Point—Municipal Building—City, John W. Hedrick, Mayor, will erect municipal building; 3 stories and basement; court room to seat 1500; Harry Barton, Archt., Greensboro; bids opened June 1; \$250,000 bonds available. (Previously noted.)

Okla., Pryor—Jail—Mayes County Board of Commrs. will erect jail; cost about \$20,000.

Tex., Ennis—City Hall—City will vote on bonds June 20 for city hall. (See Hospitals, Sanatoriums, etc.)

Tex., Houston—Fire Station—City, O. F. Holcombe, Mayor, will receive bids until June 15 to erect central fire and police station; plans and specifications from Mr. Dowdy, City Archt.; separate bids for plumbing, wiring and heating.

W. Va., Charleston—Jail, etc.—Warne, Tucker & Patterson, Archts., Masonic Temple Bldg., will receive bids until May 26 to erect jail and addition to courthouse on Virginia St.; plans and specifications from Archts.

W. Va., Morgantown—Municipal Building, etc.—City will vote June 1 on \$700,000 bonds to construct sewers and municipal building. Address City Engineer.

Courthouses.

Ga., Lumpkin—Board of County Commrs. of Stewart County, will receive bids until June 13 to rebuild burned courthouse; cost \$50,000 to \$75,000; about 90x110 ft.; brick and cement; probably metal shingle roof; cement floors; T. F. Lockwood, Archt., 212 Murrah Bldg., Columbus. Address J. V. Castleberry, Ordinary, Lumpkin.

Miss., Vicksburg—Board of County Supervisors, J. G. Sheard, Clk., will receive bids until May 27 to repair courthouse and grounds; plans and specifications at office Chancery Clerk. (Latey noted.)

Dwellings.

Ala., Birmingham—D. C. Harris will erect residence at Glenview Road and 40th St.; cost \$11,000.

Ala., Cedar Bluff—Camp B. Stone will erect residence lately noted; cost \$4500; 39x56 ft.; 2 stories; 8 rooms and bath; galvanized metal shingle roof; wood floors; hollow fireproof and interior tile; ornamental terra cotta; grates; construction by day labor, R. D. Reed, Cedar Bluff, and John Higginboth, Leesburg, foreman; also plans to erect 2-story business building, 36x78 ft. (See Mehy, Wanted—Paints, etc.)

Ala., Opp—Opp Cotton Mills will erect 21 employees' cottages; bids opened.

Ark., Little Rock—S. M. Apple will erect residence, 1867 Battery St.; cost \$12,000; 2 stories; veneer.

D. C., Washington—M. G. Lepley will erect 16 dwellings, 2028-50 Wisconsin Ave., N.W. and 2029-43 34th St., N.W.; cost \$100,000; 2 stories; brick; construction by owner.

D. C., Washington—J. B. Shapiro will erect 30 dwellings, 1539 Upshur St., N.W.; cost \$12,500; 1412-30 and 1500-08 Varnum St., N.W. and 1511-37 Upshur St., N.W.; cost \$300,000; 2 stories; brick; construction by owner.

D. C., Washington—J. A. Ruhmond will erect dwelling, 3300 22nd St., N.E.; cost \$10,000; 2 stories; brick; construction by owner.

D. C., Washington—Charles J. Walker will erect 4 dwellings, 5515-21 7th St., N.W.; cost \$20,000; 2 stories; brick; construction by owner.

D. C., Washington—W. C. and A. N. Miller will erect five 2-story brick dwellings and garages at 2713-21 29th St., N. W.; cost \$55,000; construction by owner.

D. C., Washington—Wengar Bros. will erect dwellings, 1508 Gallatin St., N. W.; cost \$15,000; 2 stories; stone; 5019 16th St., N. W.; cost \$22,000; 2 stories; brick; 5017-17 16th St.; cost \$60,000; 2 stories; brick; construction by owner.

Fla., Miami—Miami Beach Improvement Co. will erect 2 concrete-block residences in Pine Tree Dr.; cost about \$20,000.

Fla., Orlando—First Baptist Church will erect parsonage. (See Churches.)

Ga., Atlanta—E. F. Culpepper will erect dwellings 107 and 111 Elwood Dr. and 261 Greenwich Ave.; cost \$5000 each; 1-story; frame.

Ga., Atlanta—G. G. Long will erect 1-story frame dwellings at 18 Lexington Ave., 307-311 Stewart Ave.; cost \$5800 each.

Ga., Valdosta—Southern States Development Co., Inc., Franklin Pettit, Prest., 2 Wall St., New York, will erect dwellings in Jeff Davis County; 12,000 acres to be developed.

Ky., Buhan—Indian Head Coal Co., will erect 12 miners' houses; contract let May 29.

Ky., Buhan—Trace Fork Mining Co. will erect 20 miners' houses, Y. M. C. A., church and school; contract let May 30.

Ky., Montago—Meems-Haskins Coal Co. will erect 12 dwellings. (See Schools.)

La., New Orleans—J. M. Gwinn will remodel residence, 904 Lowerline; cost \$15,100; construction by owner.

Md., Baltimore—J. Hurst Purnell, 4314 St. Paul St., will erect 14 brick dwellings and garages, 2300-12 and 2400-12 W. North Ave.; cost \$34,000; 23.6x43.6 ft.; 2 stories; slag roofs; steam heat; Geo. Wessel, Archt., 2752 Winchester St.; construction by owner.

Md., Baltimore—James D. Hull, Beechfield Ave., Catonsville, will erect dwelling and garage at 2603 Lynhurst Ave.; cost \$12,000; 2½ stories; frame.

Md., Baltimore—J. E. Stansbury, Inc., 2852 Pennsylvania Ave., and others, will erect 12 dwellings on Munroe St. and Elgin Ave.; cost \$35,000; 2 stories; brick.

Md., Baltimore—N. C. Black, Windsor Hill Apts., will erect 2½-story brick dwelling on Norwood Rd. near Highfield St.; cost \$11,000.

Md., Baltimore—W. F. Breeback, 642 W. Franklin St., will erect 2½-story stone and brick residence on St. Paul St. near Millbrook Rd.; cost \$15,000.

Md., Baltimore—E. J. Gallagher Realty Co., 919 Munsey Bldg., will erect 40 2-story brick dwellings, 15 on 33rd St. between Westerwald and Ellerslie Aves., 10 on Westerwald Ave. between 33rd and 34th Sts., 5 on 33rd St. between Frisby St. and York Rd., 5 on Frisby St. between 33rd St. and Gorsuch Ave., and 5 in 2300 block Belair Rd.; daylight type; 7 and 8 rooms and bath; cost about \$200,000.

Md., Baltimore—Hugh Gamse, 1655 Monroe St., will erect 2½-story dwelling at 3807 Chatham Rd.; cost \$12,000.

Md., Baltimore—Roland Park Co., 404-10 Roland Ave., will erect 5 dwellings on Wendover Rd. near Northway, Guilford; 2½ stories; stone and tile; 29.6x32 ft.; cost about

Mo., Columbia—W. L. Nelson will erect residence.

Mo., Kansas City—Howard Knowles will erect residence at 1223 Stratford Rd.; cost \$19,000; English design; frame and stucco; exterior walls insulated with quilt; tiled breakfast room; 3 bedrooms, 2 baths, sleeping porch on second floor; maid's room and bath in wing above double garage; Courtlandt Van Brunt and A. H. Buckley, Archts.

Mo., Kansas City—Fidelity Building Co. will erect dwellings, 5001-05-07-11-25 Tracy Ave.; cost \$4000 each; also 5606-10-14-18-22-26-30 Holmes St.; cost \$3000 each.

Mo., Kansas City—William R. Jewell, Jr. will erect dwellings, 5910-12-14-16 Brooklyn Ave.; cost \$2000 each; also 5240 Paseo; cost \$5000.

Mo., St. Joseph—Morris H. Lehman will erect residence on Frederick Blvd.; cost \$16,000.

Mo., St. Louis—Mrs. Sarah Fox will erect residence in Delmar Heights.

Mo., St. Louis—Leisner Construction Co. will erect 4 bungalows in Delmar Heights; 6 rooms.

Mo., St. Louis—George Stauffer will erect residence in Delmar Heights.

N. C., Charlotte—John E. Shepard will erect residence on E. Morehead St.; cost \$10,000.

N. C., China Grove—China Grove Cotton Mills, John H. Rutledge, Secy.-Treas., is reported to erect 50 tenement houses.

N. C., Goldsboro—Col. A. C. Davis will rebuild residence lately noted burned.

N. C., Kings Mountain—George Cansler plans to erect residence.

N. C., Salisbury—Paul Tire & Rubber Co. plan to erect number of houses for employees.

N. C., Tarboro—John R. Pender, Jr., Pender Hardware Co., plans to erect brick veneer residence. (See Mch. Wanted—Brick.)

S. C., Belton—Julian Walton will erect brick bungalow on Brown Ave.

S. C., Charleston—W. H. Powers, Contr., has permit to erect 23 dwellings on site between Cypress and Mt. Pleasant Sta. and Meeting St. and Southern R.R.; cost about \$46,000; 2 stories.

S. C., Kershaw—A. M. Christmas plans to erect cottage.

S. C., Newberry—George F. Hunter will erect residence.

Tenn., Memphis—A. H. Brown will erect residence on Granville Pl.; cost about \$15,000.

Tenn., Memphis—T. L. Comer will erect bungalow on Faxon Ave.

Tenn., Memphis—Leo Goodman will erect residence on Autumn Ave. near McLean Blvd.; cost \$35,000; hollow tile and stone-kote; Spanish mission design; 2 stories; billiard and ball rooms in basement; Mahan & Broadwell, Archts.

Tenn., Memphis—J. Walter Martin will erect residence at Forrest Ave. and Evergreen St.; cost about \$20,000; brick veneer; Sieg & McDaniel, Archts.

Tenn., Memphis—W. Miller will erect Dutch Colonial residence on Autumn Ave. and Dickinson St.; Anker F. Hansen, Archt.

Tenn., Memphis—W. W. Robinson, McCallum & Robinson, will erect residence on Central Ave. and Buntyn St., Lombardy Pl. sub-division; Harker & Cairns, Archts.

Tenn., Memphis—H. Solomon will erect residence at Belvedere Blvd. and Peabody Ave.; cost about \$22,000; 2 stories; hollow tile; Mahan & Broadwell, Archts.

Tenn., Memphis—J. N. Wood will erect residence at Autumn Ave. and Dickinson St.; Anker F. Hansen, Archt.

Tenn., Memphis—Everett Woods, Mahan & Broadwell, Archts., will erect residence in Barksdale sub-division, east of Evergreen St.; Italian design.

Tenn., Memphis—J. B. Moody will erect 2 dwellings, 251 and 279 Angelus St.; brick veneer; 5 and 6 rooms; total cost about \$10,000.

Tex., Houston—H. F. MacGregor will erect residence, La Branch and Wentworth Sts.; cost \$12,500; 2 stories; 6 rooms.

Tex., San Antonio—M. A. Harkey will erect Dutch Colonial residence on Bandera Road; cost about \$10,000.

Tex., San Antonio—Jay E. Adams will erect 2-story dwelling in Gramercy Pl.; cost \$12,500.

Va., Fredericksburg—Home Builders, Inc., H. K. Sweetser, Prest., plans to erect 27 dwellings on Upper Prince Edward St., extended; 4 to 6 rooms; fireproof composition shingle roofs.

Va., Norfolk—H. W. Holland will erect residence in Colonial Place; Philip B. Moser and Erwin C. Gutzwiller, Archts.

Va., Norfolk—Mrs. L. F. Miller will erect residence on Fairfax Ave.; Philip B. Moser and Erwin C. Gutzwiller, Archts.

Va., Norfolk—Willis Company, Inc., Joseph N. Willis, Prest., Box 134, will erect 5 dwellings. (See Apartment House—Va., Richmond.)

Va., Richmond—W. M. Anderson will not erect residence on Monument Ave. as lately reported.

W. Va., Fairmont—Hellen M. Herron will erect residence on Park Drive; cost \$10,500; 2 stories; brick and tile.

W. Va., Princeton—Home Building Company will erect number of dwellings in Lilly Highway addition.

W. Va., Wheeling—William C. Gartner will erect \$10,000 residence on Birch Ave., Birch Lynn; brick and frame; George H. Dieringer, Archt.

Government and State.

Tex., Austin—Capitol—State Board of Control, S. B. Cowell, Chrmn., will receive bids until May 23 for repairs to State Capitol, consisting of taking off and replacing copper roof, repairing and painting dome, resetting steps and tile floor at west entrance, repairing inside plaster work and painting all outside sash; bids on any or all of above items; specifications from C. H. Page & Bro., Archts.

Va., Front Royal—Post Office—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C. will receive bids until June 5 to erect post office; drawings and specifications from Custodian at site or from office Supervising Archt.

Hospitals, Sanitariums, Etc.

Fla., Bradentown—Larrabee Hospital will erect 3-story addition and remodel present structure into administration building; reinforced concrete column and girder frame; hollow tile curtain walls; stucco with stone trim; fireproof floor construction; soundproof walls and floors; heating plant; electric lights; ventilating system in operating suite; nurses' silent signal system; elevators; dumb waiters; incinerator; refrigeration and ice-making plant; diet kitchens, kitchen equipment, laundry; 100 beds; Johnson & Fonda, Archts.

Mo., Marcelline—Dr. Ola Putnam will erect hospital; cost \$20,000; 52x82 ft.; 2 stories; fireproof; brick and stone; composition roof;

concrete, hardwood and composition floors; hollow fireproof and interior tile; ventilators; probably vapor heat; city lights; 1 elevator, 5.6x7.6 ft., travel 20 ft.; W. E. Hulse & Co., Archts., Hutchinson, Kans. Lately noted. (See Mch. Wanted—Elevators, etc.; Chute (Clothes).)

N. C., Charlotte—Mercy Hospital will erect nurses' home on Vail Ave.; cost \$50,000; concrete; 3 stories; 36 rooms, including reception, class and sleeping rooms; sleeping porches; plans by Father Michael McInnisney, Belmont.

Okla., Oklahoma City—Clubhouse—Will erect clubhouse at 202-8 W. Grant Ave.; cost \$235,000. (Previously noted.)

Tex., Dallas—First Presbyterian Church, Dr. Wm. M. Anderson, Chrmn., Bd. of Directors, will erect 2-story building for Richard Freeman Memorial Clinic; cost about \$60,000.

Tex., Ennis—City will vote June 20 on bonds for \$500,000 sanatorium; white school extension, \$35,000; Colonial school extension, \$25,000; city hall, \$10,000, etc. Address City Commrs.

Va., Bristol—Hospital Association, H. O. Game, Chrmn. Bldg. Comm., will erect King's Mountain Memorial Hospital on W. State St.; C. B. Kearfott, Archt.

Va., Lynchburg—State Epileptic Colony Board of Trustees will erect dormitory for 50 women near Madison Heights; 2 stories and basement; 32x120 ft.; Heard & Chesterman, Archts.; \$42,500 appropriation available.

Va., Norfolk—Calrow & Wrenn, Archts., will receive bids until May 23 to erect 3-story negro ward addition to Norfolk Protestant Hospital; 81x58 ft.; brick; reinforced concrete foundation; connected with present structure; following contractors estimating: J. L. Abbott, Nichols & Landeman, W. T. Gregory, J. H. Pierce, Seay Bros., Logan McCloud, Gooch, Williams & Co., R. R. Richardson & Co., Nugent-Price Construction Corp., Baker & Brinkley, all Norfolk, and H. D. Watts Co., Garrett Bldg., Baltimore, Md.

Hotels.

Fla., Bradentown—Henry Curry and associates will erect hotel at Cortez Beach.

Fla., Miami—Albert R. Borrell will erect apartment hotel at Miami Beach; 3 stories; 23 suites.

Md., Salisbury—Louis Estes, incptd.; I. Ernest Jones, Prest.; Annie E. Toadvine, Treas.; S. R. Douglas, Secy.; will erect hotel on Water St.; tentative plans provide 4 stories; 50 rooms.

Okla., Chickasha—J. L. Burtschl, Oklahoma City, and associates will expend \$75,000 to repair New Chickasha Hotel, 124 Chickasha Ave., noted burned; also contemplate expending \$100,000 to remodel Savoy Hotel, First St. and Chickasha Ave.

W. Va., Shinnston—Shinnston Hotel Co., R. S. Johnson and others, will erect hotel, store and office building; cost \$95,000; 76x80 ft.; 4 stories and basement; brick, reinforced concrete and hollow fireproof tile; Barrett 5-ply built-up roof; cement, Magnesite, tile and wood floors; interior tile; wire glass; vault lights; low pressure steam heat, \$6000; Carl Reger, Archt., W. Va. Utilities Bldg., Morgantown. (Lately noted.)

W. Va., Welch—S. E. Carter and associates will erect hotel, Bank and McDowell Sts.; cost \$200,000; 5 stories with foundation to permit erection of 3 additional stories; 85x72 ft.; brick; limestone trim; 103 rooms; Garry & Sheffey, Archts., Bluefield. (Previously noted.)

Miscellaneous.

Ala., Birmingham — Clubhouse — Linger Longer Lodge Bld. of Directors, Walter S. Brown, Chrmn., will erect clubhouse; main auditorium 40x60 ft.; cost \$30,000; Wm. L. Welton, Archt. (Previously noted.)

D. C., Washington—Auditorium—Washington Auditorium Corp., Robt. N. Harper, Secy., 401 Star Bldg., will erect auditorium at 19th St., between E St. and New York Ave., N. W.; cost \$350,000 to \$400,000; 1,800,000 cu. ft.; steel frame and fireproof construction; cement and slag roof; hollow fireproof and interior tile; ornamental terra cotta; wood over concrete floors; rolling partitions; wire glass; steel sash and trim; ventilators; low pressure steam heat; electric lights; seating capacity, 5000; Milburn, Heister & Co., Archts., Union Savings Bank Bldg. (Lately noted.)

Fla., Cocoa—Clubhouse—Cocoa-Rockledge Golf Club, E. P. Porcher Prest., will erect clubhouse; construct 9-hole golf course; cost \$30,000.

Fla., St. Petersburg—Market—Essbee Fish Co., (C. D. Beeman and Will Johnstone), will erect building on Beach Dr. near Central Ave.; 1 story.

Ga., Atlanta—Market—Capital City Building & Market Co., Paul F. Voss, Prest., is reported to erect \$400,000 market building at Peachtree and Cain Sts.; 3 stories and basement; concrete and steel; interior finish of vitrolite, mahogany and nickel; auditorium and banquet hall on top floor to accommodate 1000; Robert & Co., Archts.-Engrs.

Mo., St. Louis—Medical—St. Louis Medical Society, Dr. W. W. Graves, Prest., 3525 Pine St., plans to erect building; cost \$100,000.

N. C., Raleigh—Home—St. Luke's Circle of King's Daughters will erect home at New Bern Ave. and East St.; cost \$35,000; 140x110 ft.; 30 rooms, 3-room infirmary, 2 reception rooms, and 4 piazzas.

S. C., Spartanburg—Community Building—Spartan Mills, Walter S. Montgomery, Prest., will erect community building; 1 story; gymnasium 48x78 ft.; connected to present structure by corridor; also rebuild first floor of present building; J. Frank Collins, Archt.

Tex., Dallas — Exhibit Buildings—Mid-continent Oil & Gas Assn., J. L. Mahon, Chrmn. Comm., will erect exhibit building at Texas State Fair Grounds; cost \$50,000; 185x185 ft.; brick and steel; also Chamber of Commerce and Motor Trades Assn. are interested in erection of manufacturing and automobile exhibit building; cost \$130,000; 485x200 ft.; 75 ft. span running through length of building; brick and concrete, steel reinforced.

Tex., Houston—Sheds — Turning Basin Compress Co. will erect cotton sheds and construct roof over concrete floor already built; cost \$21,000; 3000 bales capacity.

W. Va., Fairview—Barn—Joshua Parrish will erect feed and livery barn.

Railway Stations, Sheds, Etc.

N. C., Wilmington—Tidewater Power Co., A. E. Fitkin, Prest., will erect building at Wrightsville station; 2 stories; tile and cement.

Schools.

Ala., Troy—State Board of Education, Montgomery, will erect State Normal School.

D. C., Washington—District Commissioners will erect Macfarland and Langley Junior High Schools; cost about \$300,000 each; Georgian architecture; 140x195 ft.; 2 and 3

stories; 13 classrooms and 10 shops; reinforced concrete, brick and terra cotta; metal window frames; combination gymnasium and auditorium; Albert L. Harris, Municipal Archt.

Fla., Daytona—Volusia County Board of Education, De Land, will erect addition to Senior High School; cost \$55,000; 60x90 ft. and out door gymnasium 40x50 ft.; 8 classrooms; brick or hollow tile; Spanish tile roof; hardwood and concrete floors; rolling partitions; wire glass; Dunham system of heat; electric lights; bids opened about June 10; Jno. A. Rogers, Archt., Box 506. (Lately noted.)

Fla., Jacksonville—Duval County Board of Public Instruction, Dr. Fons A. Hathaway, Supt., will erect addition to Davis Street School; cost \$50,000; 2 wings; 40x150 ft. each; 2 stories; brick; composition shingle roof; wood floors; steam heat, \$5000; Mark & Shefall, Archts., 210 Clark Bldg.; bids opened. (Lately noted.)

Fla., Macclenny—Baker County Board of Public Instruction, J. D. Dugger, Chrmn., will receive bids until June 5 to erect school; brick and frame; 6 classrooms and assembly hall; plans and specifications at office Jefferson D. Powell, Archt., Bisbee Bldg., Jacksonville, and office Mr. Dugger.

Fla., Miami—Dade County Board of Public Instruction will erect 30-room addition to high school; cost \$90,000; H. Harold Mundy, Archt.; complete Buena Vista, Johnson, Riverside, Southside, Highland Park and colored school; cost \$50,000; A. E. Lewis, Supervising Archt.; also plans to erect school east of Riverside Park; cost \$100,000.

Fla., Palmetto—Board of Public Instruction will erect high school; cost \$35,000; load bearing tile walls; stucco exterior walls; stone trim; brick fire walls; asphalt built-up roof; plumbing; steam heat; 10 classrooms, library, study hall, assembly hall, laboratory, principal's office, rest room, shower baths, individual lockers and storage rooms; plans ready about June 20; Johnson & Fonda, Archts., Bradentown.

Ga., Athens—University of Georgia, Harry Hodgson, Chrmn., Bldg. Comm., will complete Memorial Hall, first unit of work contemplated; Ludlow & Peabody, Archts., 101 Park Ave., New York. (Previously noted.)

Ga., Atlanta — Fulton County defeated \$500,000 bonds to erect 32 schools and improve present structures; J. W. Simmons, Prest., County Board of Education. (Lately noted.)

Ga., Bainbridge—Board of Education, A. B. Conger, Chrmn., will erect high school; G. Lloyd Preacher & Co., Archts., 306 Commercial Bank Bldg., Raleigh, N. C., Atlanta and Augusta, Ga.; bids opened. (Lately noted.)

Ga., Rochelle—School Board will erect consolidated school; considering election on bonds.

Ky., Bulan—Trace Fork Mining Co., will erect school. (See Dwellings.)

Ky., Hazard—Perry County School Board will erect 5 school buildings; contract May 22. (Lately noted.)

Ky., Louisville—Board of Education, Samuel D. Jones, Bus. Director, will receive bids until May 22 to erect addition, alter, install plumbing, electrical work, heating and ventilating at George Rogers Clark School; plans and specifications at office Mr. Jones; Edgar A. Rassinier, Archt.; Lewis & Warren, Conslt. Engrs.

Ky., Minerva—Minerva Improvement Co. organized to erect building for Minerva Consolidated School Dist. Address H. D. Smoot, Prest., Board of Directors, R. D. No. 1, Dover.

Ky., Montago—Meems-Haskins Coal Co. will erect school, church, Y. M. C. A. building and 12 miners houses; contract in 3 weeks.

Ky., Pineville—School Board, Gus Cullen, Prest., will erect addition to school; auditorium to seat 750 to 1000 and 5 or 6 classrooms; \$35,000 bonds voted. (Lately noted.)

La., Lake Charles—Calcasieu Parish will vote May 18 on \$70,000 school bonds. Address School Board.

Md., Baltimore—Board of Awards, Mayor Wm. F. Broening, Prest., City Hall, will expend \$598,300 for improvements to schools as follows: Plumbing, \$93,300; painting, \$111,000; electric lighting, \$75,000; heating, \$169,000; general repairs, \$100,000; J. Frank Crowther, Inspector of Buildings, City Hall, (Lately noted in part.)

Md., Salisbury—State Board of Education, Dr. A. J. Cook, Supt. of Schools, Annapolis, will erect buildings for Eastern Shore Normal School.

Md., Salisbury—Wicomico County will vote May 23 on \$300,000 school building bonds. Address County Board of Education. (Lately noted.)

Miss., Allen—Copiah Parish School Board, Hazlehurst, will erect school; cost \$10,000.

Miss., Brandon—Board of School Trustees, A. J. Lindsley, Secy., will erect school; cost \$25,000; 55x80 ft.; brick and frame; composition built-up roof; wood floors; steam heat; bids opened May 18; Emmett J. Hull, Archt., Daniel Bldg., Jackson. (Lately noted.)

Miss., Batesville—Board of Mayor and Aldermen authorized election May 30 on \$35,000 bonds to repair, remodel and enlarge school.

Miss., Crowder—Crowder Separate School Dist. Trustees will erect building; cost \$18,000; 127x84 ft.; brick; composition roof; pine floors; Delco lights; ventilators; Mr. Abbott, Archt., Clarksdale; bids opened. (Lately noted.)

Miss., Durant—City voted \$80,000 bonds, including \$10,000 for improvements and addition to high school. (Lately noted.)

Miss., Gatesville—Copiah Parish School Board, Hazlehurst, will erect school.

Miss., Highpoint—Highpoint Consolidated School Dist. will vote June 5 on \$10,000 bonds to erect school and repair building; B. M. McCully, Clk., Dist. School Trustees.

Miss., Jackson—City Commissioners called election June 3 on \$35,000 school bonds. (See City and County.)

Mo., Bryson—School Board, W. D. Walkup, member, Green Ridge, will erect building; bids opened.

Mo., Columbia—University of Missouri, Edw. E. Brown, Bus. Mgr., rejected bids to rebuild mechanics arts building and extension to medical building and will receive new bids until May 20; plans and specifications at office Jas. P. Jamieson and George Spearl, Archts., Arcade Bldg., St. Louis, and office Western Contractor, 521 Locust St., Kansas City. (Lately noted.)

Mo., Higbee—Board of Education, J. T. Randolph, Secy., will receive bids until May 31 to erect addition to high school; cost \$16,000; 46x86 ft.; Carey roof; concrete and pine floors; wire glass; steel sash and trim; steam heat. (Lately noted.)

Mo., Joplin—Board of Education, Jesse Zook, Secy., will expend \$10,000 to remodel school.

Mo., Kennett—County Board of Education, Edw. D. McNally, Supt., will consolidate Bucoda, Paulding and Arbyrd school districts and erect central school.

Mo., Monett—Monett School Dist. will vote May 19 on following bond issues: \$7500 to

erect ward school on Marshall Hill; \$7500 to erect school on site of Central school building and \$60,000 to erect high school. Address District School Trustees.

Mo., Parkville—Park College Trustees will receive bids at office J. H. Felt & Co., Archts., 800 Grand Avenue Temple, Kansas City, until May 22 to erect science hall building and addition to Carnegie Library; separate bids for heating, plumbing and electric wiring; plans and specifications for science hall at office J. H. Felt & Co., also Park College; plans for library building at office Keene & Simpson, Archts., 403 Reliance Bldg., Kansas City, also Park College. (Previously noted in part.)

Mo., St. Charles—Board of Education called election May 20 on \$224,000 bonds; \$200,000 to erect high school and \$24,000 for addition to McKinley and Franklin grade schools.

Mo., Warrenburg—Central Missouri State Teachers College Board of Regents, R. J. Grover, Prest., rejected bids to erect addition to assembly hall and administration building; cost \$150,000; sand stone; cafeteria in basement; Samuel M. Hitt, Archt., Main St. (Lately noted.)

N. C., Asheville—Buncombe County Board of Education, Frank L. Wells, Secy., will erect school in Turkey Creek Consolidated District; cost \$10,000; 4 classrooms and auditorium; brick; T. E. Davis, Archt.; bids opened. (Lately noted.)

N. C., Charlotte—Mecklenburg County Board of Education will consolidate Carmel, Sardis and Oak Grove schools and erect central school; cost \$20,000; 10 rooms, auditorium and basement.

N. C., Concord—Scotia Seminary, Dr. Verner, Prest., will erect annex; 4 stories; brick.

N. C., Denton—Denton School Dist. will vote June 6 on \$20,000 bonds to erect school. Address Dist. School Trustees.

N. C., Fairmont—Board of Education will erect school; \$75,000 bonds voted. (Lately noted.)

N. C., Greensboro—City Board of Education J. Norman Willis, Chrmn., will receive bids until June 5 to erect school at Cypress and Bessemer Aves.; bids as follows: (1) Entire work, exclusive of plumbing, heating and ventilation; (2) plumbing; (3) heating and ventilating; (4) electric wiring; drawings and specifications at office Starrett & Von Vleck, Archts., 8 W. 40th St., New York. (Lately noted.)

N. C., Hookerton—School Trustees will erect building; cost \$50,000; 10 rooms.

N. C., Jonesboro—Jonesboro Graded School, J. Gary Allen, Supt., will receive bids until May 23 to erect additional wing to school building; plans and specifications at office Supt. and office Stiles S. Dixon, Archt., Fayetteville.

N. C., Lattimore—Lattimore School Dist. Trustees will erect building; cost \$15,000; 6 or 8 classrooms, library, teachers' room and auditorium to accommodate 500 to 800; brick.

N. C., Vanceboro—Board of Education will erect proposed high school; G. Lloyd Preacher & Co., Archts., Commercial Bank Bldg., Augusta, Ga.; will soon call for bids.

N. C., Winston-Salem—City, Jas. G. Hanes, Mayor, will receive bids until May 23 to erect Skyland School; cost \$125,000; 38 to 40 classrooms and auditorium; C. W. Faw, Archt.; plans and specifications obtainable at office Chas. M. Crawford, Supt. of Bldg. Construction, Winston-Salem; on file at Building Exchange, Norfolk, Va., Atlanta, Ga., and Charlotte, N. C.; separate bids until May 23 for heating plant; plans and specifications on file at City Hall, Winston-Salem, and at of-

fice Wiley & Wilson, Conslt. Engrs., Lynchburg, Va. (Lately noted.)

Okla., Cushing—School Board will erect auditorium and gymnasium to high school under construction; election on \$65,000 bonds soon.

Okla., Kingfisher—School Board will erect high school and repair present buildings; plans to issue \$90,000 bonds.

Okla., Norman—Board of Education, Chas. S. Standley, Secy., Box 446, will erect 2 ward schools; cost 35,000 each; 1 story; 8 rooms; brick and concrete; cement floors; ventilators; steam heat; Monnett & Reid, Archts., Oklahoma City. (Lately noted.)

Okla., Pawhuska—Board of Education will erect grade school in Prudon addition; 6 rooms and assembly room; Jno. O. Bradley, Archt.

S. C., Central—School Board will erect building; cost \$25,000; Jas. C. Hemphill, Archt., Greenwood. (Lately noted.)

S. C., Charleston—Board of School Commissioners authorized \$750,000 bonds to erect and maintain school buildings; will issue \$200,000 at present; A. Burnet Rhett, Supt. of Schools. (Lately noted.)

S. C., Columbia—City will soon vote on \$75,000 bonds to enlarge high school. Address Board of Education.

S. C., Easley—School Board will erect building; cost \$30,000; Jas. C. Hemphill, Archt., Greenwood.

S. C., Fairforest—Fairforest School Dist. No. 2 will erect several schools; plans to issue \$20,000 bonds; E. E. Crow, W. R. Frey, Trustees.

S. C., Inman—School Trustees will erect addition to building; cost \$18,000.

S. C., Lancaster—Lancaster School Dist. Trustees will erect two grammar schools and one high school; \$160,000 bonds sold.

S. C., Pickens—School Board will erect building; cost \$15,000; Jas. C. Hemphill, Archt., Greenwood.

Tenn., Chattanooga—Hamilton County Board of Education, Jas. A. Roberts, Supt., will erect annex to Central High School; cost \$50,000; auditorium, to seat 1500, and 6 classrooms; bids opened May 17; J. D. Alsop, Archt.; will also erect 4-room brick grammar school at East Dale, 4-room annex to Tyner School and 4-room annex to Red Bank School; total cost \$125,000. (Lately noted.)

Tenn., Chattanooga—Board of Education will erect proposed auditorium to Ridgedale Grammar School; seating capacity 800; cost \$15,000 to \$20,000; ready for bids.

Tenn., Corryton—County Board of Education, Knoxville, will erect school; 2 stories and basement; brick; 7 classrooms and auditorium to seat 400; R. F. Graf & Sons, Archts.-Engrs.

Tenn., Crossville—County Board of Education, Jno. S. Reed and others, will erect 4 schools in county; asphalt shingle roofs; hardwood floors.

Tenn., Rogersville—Board of Mayor and Aldermen will receive bids until June 8 to erect consolidated school; 20 rooms; plans and specifications at office D. R. Beeson, Archt., Johnson City, after May 25.

Tenn., Wartburg—Board of Education, Jno. M. Davis, Chrmn., will erect school; cost \$40,000.

Tex., Breckenridge—Board of Education will erect school in Peek's Ward; \$100,000 bonds sold.

Tex., Burkburnett—Board of Education will erect high school; plans to issue \$150,000 bonds; C. H. Page & Bro., Archts., Austin.

Tex., Ennis—City will vote bonds June 20

for white and Colonial school extensions. (See Hospitals, Sanatoriums, etc.)

Tex., Goose Creek—Goose Creek Independent Dist. School Trustees, George T. Gallo-way, Prest., will erect high school, ward school, Bay Town School and negro school; cost about \$200,000; C. H. Page & Bro., Archts., Austin; bids opened. (Lately noted in part.)

Tex., Kaufman—Board of Education, O. P. Norman, Supt., will erect high school and ward school; cost \$100,000; C. H. Page & Bro., Archts., Austin; bids opened. (Previously noted.)

Tex., Kerens—Kerens Independent School Dist. voted \$95,000 bonds to erect high school. Address Dist. School Trustees. (Lately noted.)

Tex., La Feria—La Feria Independent School Dist. Trustees, J. O. Davis, Secy., will erect school; M. L. Waller & Co., Archts., San Antonio; bids opened.

Tex., Orange—Board of Education will erect ward school; cost \$175,000; C. H. Page & Bro., Archts., Austin. (Lately noted.)

Tex., San Angelo—Board of Education will erect school for negroes; cost \$10,000.

Tex., San Antonio—M. L. Waller & Co., Archts., 511 Brady Bldg., will receive bids until May 18 to erect school at Alamo Heights; separate bids for plumbing, heating and wiring; cost \$60,000; 70x115 ft.; 3 stories; brick and concrete; tar and gravel roof; wood and cement floors; steam heat; plans and specifications at office architects. (Lately noted.)

Tex., San Antonio—Harlandale School Dist. No. 46 will erect school; \$30,000 bonds available; W. A. Thurman, Supt., Bexar County Schools.

Tex., Sherman—School Board will erect addition to high school; cost \$100,000; C. H. Page & Bro., Archts., Austin. (Lately noted.)

Va., Belspring—Pulaski County Board of Education, Pulaski, will receive bids until May 25 to erect 8-room, 1-story brick school at Dublin and similar 6-room building at Belspring; cost \$20,000 and \$16,000; separate bids for each building and bids as a whole; plans and specifications at office Supt. E. L. Darst, Dublin. (Lately noted.)

Va., Dublin—Pulaski—Pulaski County Bd. of Education, Pulaski, will receive bids until May 25 to erect 6-room, 1-story brick school. (See Va., Belspring.)

W. Va., Fairmont—City Board of Education, Mary M. DeBolt, Secy., will erect high school gymnasium; R. A. Gillis, Archt., Fleming Bldg.; bids opened. (Lately noted.)

Stores.

Ala., Russellville—C. R. Burgess will erect building on Franklin St.; 50x80 ft.; 2 stories; brick.

Ala., Tuscaloosa—W. W. Fordyce is reported to erect several store and office buildings.

D. C., Washington—J. E. Philips will erect 5 one-story brick stores; 618-25 Kennedy St., N. W.; cost \$10,000; construction by owner.

D. C., Washington—L. and M. Jacobs will erect building at 912 14th St., N. W.; 3 stories; stone and brick.

Fla., West Palm Beach—D. F. Dunkle will rebuild business block at Rosemary St. and First Ave. noted burned.

Fla., Tampa—Piggly Wiggly Co., E. N. Lively, Mgr., will erect 5 stores at Grand Central Ave. and S. Boulevard; cost \$15,000 to \$20,000; pressed brick; F. M. Curtis, Archt.

Ga., Atlanta—M. C. Kiser Real Estate Co.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

will erect 7 stores at W. Peachtree St. and North Ave.; brick; DeFord Smith, Archt.

Ga., Cairo—J. L. Oliver's Son will erect 3rd floor addition, 50x100 ft., install new front, show windows and make interior changes in store; Wm. J. J. Chase, Atlanta, and M. S. Steward, Cairo, Asso. Archts.; bids opened.

Ky., Whitesburg—J. A. Holbrook, Colson, will erect business building on Main St.; cost \$25,000; brick; contract by May 30.

Ky., Whitesburg—George Hogg and Dr. Gld Whitaker will erect store and office building on Main St.

Ky., Whitesburg—Ed. L. Williams will erect business building on E. Main St.; cost \$25,000; contract in 2 weeks.

La., Alexandria—Pineus & Murphey will erect business building on Third St.; 3 stories; brick.

La., New Orleans—Jos. Burnstein will remodel Tulane Shop on Canal St.; Emile Weil, Archt., Whitney Central Bldg.

La., New Orleans—Mercantile Service Co., Incptd.; W. F. Callahan, Prest.; Sidney Story and L. J. Polse, V.-Ps.; C. S. Barnes, Treas.; E. B. Skelton, Secy.; will erect 3 story building at 610-12 Baronne St.; brick; auditorium on third floor to seat 500.

Mo., Jefferson City—Hugh Stephens Printing & Stationery Co., Otto C. Botz, Prest.; will erect building on High St.; cost \$30,000; 41x100 ft.; 2 stories, basement and sub-basement; brick and concrete; probably hollow fireproof tile; hardwood and concrete floors; wire glass; metal doors; one freight elevator; Clifford Johnson, Archt., Sedalia. (Lately noted.)

Mo., Joplin—Fleischaker Dry Goods Co., Will Fleischaker, Mgr., will remodel store; cost \$20,000; A. C. Michaelis, Archt., 324 Miners Bank Bldg.; is receiving bids.

Mo., Kansas City—C. P. Hucke will erect building at 6208-10 Independence Ave.; cost \$10,000; 1 story; brick.

Mo., Kansas City—Sam Josephson will expend \$10,000 to remodel building at 1112 Baltimore Ave.

Mo., Kansas City—Jno. T. Neil will erect 2-story brick building, 4436-38 Troost Ave.; 1-story brick building, 4640-42 Troost Ave. and 1-story brick garage, 4644-46 Troost Ave.; total cost \$19,000.

Mo., St. Louis—Funstun Bros. & Co., Albert M. Ahern, Prest., will erect business building at Grand and Laclede Aves.

N. C., Charlotte—Zeke Johnston will erect store on 4th St.

N. C., Kings Mountain—E. B. Scruggs, Cherryville, will erect business building.

N. C., Lexington—Fitzhugh B. Harmon will erect business building on N. Main St. cost \$65,000 to \$75,000; 2 stories and basement; fireproof; brick; 5 stores on first floor; 18 offices on second; W. R. Northup, Archt., Winston-Salem.

N. C., Rutherford—J. L. Taylor will erect 2 stories; 36x80 ft. and 30x80 ft.; metal roof and ceilings; cement and wood floors; plaster board; ornamental terra cotta; wire glass; steel sash and trim; safes; ventilators; electric lights. (Lately noted.)

S. C., Marion—J. S. Davis will erect business building on Main St.

S. C., Owings—R. O. Hunt will erect building to replace burned structure.

S. C., Owings—Dr. G. W. Owings will erect building to replace burned structure.

S. C., Union—Peoples Supply Co. will erect building to replace structure lately noted burned.

Tenn., Knoxville—S. H. George & Sons will

expend \$44,500 to remodel and extend building at Wall Ave. and S. Gay St.

Tenn., Memphis—B. E. Berry, 32 Porter Bldg., will erect business building; cost \$10,000; 63x56 ft.; hollow tile and brick; built-up asphalt roof; tile and concrete floors; Arcola heat; construction by owner. (Lately noted.)

Tex., Beaumont—Geo. W. Weller will erect business building on Bowie St.; cost \$40,000.

Tex., Dallas—J. P. Thomas will erect two 1-story brick stores, 2916-18 Oak Lawn St.; cost \$12,000.

Tex., Dallas—Frank Thyfault will erect stores at 817-21 McKinney St.; cost \$16,000; 2 stories; brick.

Tex., San Antonio—J. M. Booth will erect store and apartment building, 10th and Austin Sts.; 2 stories; brick and concrete; Beverly W. Spillman, Archt.; W. C. Perry is lowest bidder at \$18,200; Brown Plumbing Co., plumbing \$900. (Lately noted.)

Va., Richmond—Postmaster Hay T. Thorn-ton will erect 5 stores.

Theaters.

Fla., West Palm Beach—Williams & Nichols, Inc., Palm Beach Tobacco Co., will erect theater on Clematis Ave. nr. Poinsettia St.; cost \$50,000; 88x84 ft.; steel columns and trusses, hollow tile walls; 5-ply built-up roof; interior tile; wire glass; concrete floors; steel sash; ventilators; W. Manly King, Archt.; bids opened about May 25. Address owner. (Lately noted.)

Okla., Picher—Picher Theater Co., Julius Bookman, Prest., plans to erect theater on Main St.; cost \$15,000; brick.

Tex., Robstown—M. J. Parker will erect moving-picture theater; brick; steel ceiling; M. L. Waller & Co., Archts., San Antonio.

Tex., San Antonio—San Antonio Amusement Co., W. J. Lytle, Prest., will erect moving picture theater at Houston and Travis Sts.; cost about \$1,000,000; seating capacity 3500; Prince & Benjamin, Archts., Dallas.

Warehouses.

Ky., Jeff.—Hamden Lumber & Supply Co. will erect warehouse and supply house; contract May 25.

Ky., Louisville—Jos. Lang, 515 E. Market St., will erect warehouse; cost \$40,000; 4 stories; 50x80 ft.; semi-fireproof; brick.

Md., Baltimore—Baltimore Office Supply Co., 641 Columbia Ave., will erect warehouse; cost \$20,000; 20x185.5 ft.; 4 stories; brick; slag roof; steam heat; Fred Thomas, Archt., 2935 E. Baltimore St.; construction by owner. (Lately noted.)

N. C., Charlotte—Textile Mill Supply Co., will erect storage and manufacturing building; 120x125 ft.; 3 stories and basement; cast iron columns (alternate on wood construction); steel beams; brick walls; steel sash; tar and gravel roof; maple floors; 2 elevators, 8x10 ft., 2-ton capacity; bids opened May 22; Lockwood, Greene & Co., Archts. (Lately noted under Bank and Office.)

N. C., Greensboro—Tomlinson Co., A. A. Tomlinson, Prest., Philadelphia, Pa., will establish branch distributing office; erect building on Lyndon St.; cost \$35,000; 3 stories.

N. C., Shelby—O. Max Gardner is prest. of association considering erection of cotton warehouse; 6000 bales capacity.

S. C., Florence—Tri-State Tobacco Growers Co-operative Marketing Assn., C. O. Dixon, Mgr., South Carolina Division, will erect warehouse; 100x200 ft.

Tex., Dallas—Edwards Manufacturing Co. will erect office and warehouse building, 803 Collin St.; cost \$30,000; 3 stories; brick.

Tex., Galveston—Crespi & Co., H. L. Ziegler, Local Representative, will erect cotton warehouse; cost \$250,000; 2 stories; 50,000 bales capacity; wood construction with sheet iron outer walls and brick fire walls; Robt. J. Cummins, Consult. Engr., Houston. (Previously noted.)

BUILDING CONTRACTS AWARDED

Apartment-Houses.

Ark., Pine Bluff—Adam J. Robinson will erect Ponce De Leon apartment building at Harding Ave. and State St.; cost about \$14,000; Spanish design; stucco; 1 story; 6 apartments of 5 rooms, bath and sleeping porch; M. M. Redmond, Contr.

D. C., Washington—Liberty Realty Co., Inc., will erect apartment house, 1909 19th St.; cost \$175,000; brick and concrete; 6 stories; M. G. Lepley, Contr.

Ga., Atlanta—Mrs. Byrd H. Barr will erect 2 duplex apartment houses at 89 Penn. Ave. and North Boulevard, Boulevard Park; cost \$15,000 each; also 7-room bungalow at Linwood Pl. and Barnett St.; cost \$7500; Barr & Payne Contracting Co., Contr.

Md., Baltimore—Eleanor R. Stiegler, 6 Roland Ave., will erect apartment house at 6 Roland Ave., cost \$50,000; 65x76.9 ft.; 3 stories; hollow tile; Henry A. Knott & Co., Contrs., 2101 N. Calvert St.

Md., Baltimore—Clyde N. Friz and others are interested in company to erect Lombardy-Tuscany group of apartment houses at 40th St. and Stony Run Lane; cost \$200,000; 5 buildings, each 38x89 ft., 4 stories, 6 apartments of 6 and 7 rooms and bath; tile roofs; probably steam heat; porches; garages in basements; Clyde N. Friz and Nelson Friz, Archts., Lexington Bldg.; Price Construction Co., Contr., Maryland Trust Bldg.

Md., Baltimore—Walter Scott, 1311 St. Paul St., will erect apartment house on

Roland Ave. near Lake Ave.; cost about \$30,000; 48x36.2 ft.; 3 stories; brick; 3 apartments of 6 rooms and 2 baths, enclosed living and sleeping porches; Clyde N. & Nelson Friz, Archts., 2010 Lexington Bldg.; J. Henry Smith, Contr., 1426 Light St.

S. C., Ware Shoals—Ware Shoals Manufacturing Co. will erect 50 bungalow apartment houses, connected to form one, and 25 cottages, all for employees; cost about \$150,000; hollow tile; 4 rooms and bath; J. E. Sirrine & Co., Archts.; Minter Homes Co., Contr., both Greenville. (Lately noted in part.)

Tenn., Memphis—Dave Dermon will erect store and apartment building on Madison Ave.; cost about \$25,000; 50x150 ft.; brick; 2 stories; 2 stores on first floor; 10 apartments on second floor; W. C. Lester, Archt.; T. J. Bobbitt, Contr.

Va., Norfolk—Dr. R. C. Hoge will erect apartment house at Brandon Ave. and W. Ghent Blvd.; cost about \$140,000; brick; 4 stories; 24 apartments of 5 and 6 rooms and porch; court; C. C. Pierce, Contr.

W. Va., Wheeling—Alex. Campbell, Jr., will erect apartment house at Lennox; brick; 3 stories; 6 apartments of 4 rooms, kitchen and bath; Louis D. Grubb, Archt.; George Reed, Contr.

Association and Fraternal.

Fla., Jacksonville—Knights of Pythias will remodel building at 117-19-21 E. Forsyth St.; cost about \$100,000; stucco; lodge

room, 50x70 ft.; ante rooms, lockers; banquet room, kitchen and 6 offices on second floor; 2 stores on ground floor; Mark & Sheftall, Archts.; W. B. Lamb, Contr.

Gal., Albany—Young Men's Christian Assn., B. B. Ivey, Prest., Board of Directors, will enlarge building; install swimming pool, enlarge gymnasium and basketball court, etc.; S. R. Fetner, Archt.; A. T. Ittner Co., contr. at \$15,050; separate contracts for plumbing, wiring, tile work, etc.

Mo., Columbia—Kappa Alpha Theta Sorority will erect building; cost \$30,000; 33x57 ft.; brick; hollow fireproof and interior tile; asphalt single roof; hardwood floors; vapor heat; electric lights; H. S. Bill, Archt., Miller Bldg.; Simmon Bros. Construction Co., Contr.

Bank and Office.

Ala., Tuscaloosa—First National Bank will remodel building; new front; vaults by Mosher Safe Co., Hamilton, O.; contract let. Address The President.

Fla., Tampa—Exchange National Bank, A. C. Clewis, Prest., will erect bank and office building at 601 Franklin St.; cost about \$500,000; 10 stories; 100x105 ft.; brick, steel and stone; Stone & Webster, Archts.-Constrs., 120 Broadway, N. Y., and Boston.

La., New Orleans—New Orleans Itinerary & Light Co., J. D. O'Keefe, Receiver, will rebuild structure damaged by fire; cost \$120,000; brick wall; wood joists; composition roof; wood floors; Otis elevator, or equal; Favrot & Livaudais, Ltd., Archts., Hibernia Bank Bldg.; George J. Glover, Contr., 1033 Whitney Bldg.

La., New Orleans—Federal Reserve Bank of Atlanta will erect building for New Orleans branch; cost \$750,000; 6 stories and basement; steel frame; granite exterior; Johns-Manville roof; concrete, hardwood, tile and composition floors; hollow fireproof and interior tile; metal doors; wire glass; vault lights; ventilators; steel sash and trim; vaults and mail chutes under separate contract; Otis elevators or equal; Rathbone DeBrys, Archt., 1406 Hibernia Bank Bldg.; George J. Glover, Contr., 1033 Whitney Bldg., both New Orleans.

N. C., Thomasville—First National Bank will erect building; cost \$100,000; 40x95 ft.; 5 stories and basement; fireproof; limestone and granite; electric elevators; burglar proof vaults; Benton & Bengtson, Archts., Wilson, N. C. and Richmond, Va.; Jones Construction Co., Contr., Charlotte.

Okla., Muskogee—Exchange National Bank, M. Board, Prest., will remodel and redecorated building at 3rd St. and Broadway; cost \$75,000; marble construction and floors; plans by Schooley Bank Equipment Co., Kansas City, Mo.; Manhattan Construction Co., Contr., Muskogee.

Va., Richmond—Richmond Trust Co., John Skelton Williams, Chrmn. of Board, will erect bank and office building at 7th and Main Sts.; cost \$700,000; 7 stories; plain foundation; brick, steel and stone; J. T. Wilson, Contr., Mutual Bldg.

W. Va., Bluefield—First National Bank, Paul McIlhenny, Cashier, will remodel 3-story building at Federal St. and Princeton Ave.; cost \$150,000; 64x85 ft.; limestone and granite; Fred T. Ley & Co., Contr., 19 W. 44th St.; plans by Philip J. Rucker, First National Bank.

W. Va., Wheeling—Quarter Savings & Trust Co. will erect bank and office addition on 16th St.; 20x40 ft.; concrete and cement; connected with present structure; vaults; Fred F. Faris, Archt.; R. R. Kitchen Co., Contr.

Churches.

Fla., St. Petersburg—First Baptist Church will complete building; cost about \$50,000; McDevitt—Fleming Co., Contr., Chattanooga, Tenn.

Md., Baltimore—All Saints Lutheran Church, Rev. J. B. Lau, Pastor, 605 N. Linard Ave., will erect building at Lyndhurst and Edmondson Aves.; cost \$50,000; 50x70 ft.; Tudor-Gothic architecture; Port Deposit granite; slate roof; hardwood floors; steam heat; electric lights; plaster board; ornamenta terra cotta; interior tile; rolling partitions; auditorium to seat 350; Frederick E. Beall, Archt., 306 St. Paul St. and 1355 N. Gilmore St.; Hicks, Tase & Norris, Contrs., 106 W. Madison St.

Md., Baltimore—Huber Memorial Lutheran Church will erect 1-story stone building, Alameda and 29th St.; cost \$20,000; 54x90 ft.; slag roof; steam heat; F. Heldrich, Architect, 1156 Longwood St.; Oscar Hilfeldt, Contr.

N. C., Concord—Forest Hill Methodist Church, Rev. J. F. Armstrong, Pastor, will erect Sunday School addition; cost \$18,000; 42x84 ft.; brick veneer; slate roof; rift pine floors; steam heat; electric lights; John R. Query, Contr.

Tex., Victoria—First Presbyterian Church, Rev. John B. Hudson, Pastor, will erect building at E Goodwin and N. Liberty Sts.; cost \$45,000; hollow tile faced with brick; asbestos roof; hollow fireproof tile; metal ceilings; rolling partitions; John Leffland & Son, Archts.; J. W. Sample, Contr. (See Mch. Wanted—Heating Plant; Art Glass, Furniture (Church).)

City and County.

Tex., Amarillo—Municipal Building—City, Lon D. Marrs, Mayor, will erect auditorium, library and municipal building; 210x241 ft.; brick and concrete; concrete and hardwood floors; metal shingle roof; metal ceilings; metal doors; vaults; gas and steam heat, \$5000; electric lights; Smith & Townes, Archts.; Lang & Witchell, Asso. Archts., Dallas; V. E. Ware, El Paso, contr. at \$207,000; separate contracts for plumbing, heating and wiring.

Courthouses.

N. C., Rockingham—Board of County Commrs., B. F. Reynolds, Chrmn., will erect courthouse; 3 stories and basement; brick, 207 Trust Bldg.; John P. Little & Son, contr. limestone and granite; Chas. C. Hook, Archt., at \$177,450, both Charlotte; separate contract for heating.

Dwellings.

D. C., Washington—J. Freund will erect 9 dwellings, 2825-27 and 2816-28 27th St., N. E.; cost \$27,000; 1 story; frame; M. & R. B. Warren, Contrs.

D. C., Washington—D. N. Rust, Jr., will erect 8 2-story frame dwellings, 813-19, 812-818 Quantana Pl., N.W.; cost \$48,000; D. H. Tyler, Contr.

D. C., Washington—Oswald Gueth will erect 6 dwellings, 1400-10 Lawrence St., N. E.; cost \$32,000; 1½ stories; Maurice Joyce, Contr.

D. C., Washington—H. S. LeRoy will erect 2-story brick dwelling, 3201 Garfield St., N. W.; cost \$18,000; A. L. Smith & Co., Contrs.

Md., Baltimore—Chas. A. Cummins, Consolidated Engineering Co., will erect dwelling and garage, Somerset Pl. near Somerset Rd.; cost about \$15,000; 34.2x52.6 ft. and 20x29 ft.; 2½ stories; brick; slate roof; steam heat; J. E. Moxley, Jr., Archt., 851 Equitable

Bldg.; Consolidated Engineering Co., Contr., 243-269 Calvert Bldg.

Md., Baltimore—H. Webster Cooke, 3536 Gunther Bldg., will erect 7 dwellings at 2000-12 E. 30th St.; cost about \$35,000; 3 stories; brick; J. C. Spedden, Archt.; Jerome I. Love, Contr., 1713 Montpelier St.

Md., Baltimore—S. Stanley Fogellas, The News, will erect dwelling on Elmwood Rd. near Squirrel Path; cost about \$10,000; 2½ stories; 34x28 ft.; hollow tile; slate roof; hot water heat; W. H. Emory, Jr., Archt., 615 Munsey Bldg.; John C. Mach, Contr., 3903 Callaway Ave.

Md., Baltimore—West Arlington Realty Co. will erect four 2-story frame dwellings, Belview Ave. east of Norman Ave.; cost \$14,500; 20x24 ft.; slate roof; hot water heat; McClure Co., Archt., 208 E. Lexington St.; Newton & Stalter, Contrs.

Md., Baltimore—Kenneth K. Kirwan, Windsor Court Apts., will erect dwelling and garage at 209 Chancery St.; cost \$18,000; 58.2x29 ft.; 2½ stories; stone; slate roof; hot water heat; W. H. Emory, Jr., Archt., 615 Munsey Bldg.; Norman R. Ellis, Contr., 11 E. Lexington St.

Mo., Columbia—Dr. A. H. R. Fairchild will erect residence on Glenwood Ave.; cost about \$10,000; hollow tile and brick veneer; Stewart Bros., Contrs.

N. C., Belmont—S. P. Stowe will erect residence and garage; 2 stories; 100x78 ft.; 16 rooms and 5 baths; face brick and hollow tile; tile roof and porch floors; steam heat; electric lights; incinerator; refrigerating machine; White, Streeter & Chamberlain, Archts.; Brown-Harry Co., contr. at \$79,000, all Gastonia.

N. C., Spindale—Stonecutter Co. will erect 25 dwellings in Stonecutter village; Hix Hill, Contr.

S. C., Camden—George A. Creed will erect 10-room residence; Warren H. Harris, Contr.

S. C., Ware Shoals—Ware Shoals Manufacturing Co. will erect 25 cottages for employees. (See Apartment Houses.)

Tenn., Knoxville—Dam M. Chambliss, Box 753, will erect residence on Kingston Pike; cost \$31,000; Colonial design; 2 stories; 8 rooms; rough face brick; tile roof; hardwood and tile floors; hot water heat, about \$4500; A. B. Baumann and A. B. Baumann, Jr., Archts., Market and Main Sts.; B. T. Thomas, Contr., Empire Bldg.

Tenn., Memphis—H. N. Pinkerton will erect residence on Monroe Ave., west of Parkway; cost about \$10,000; hollow tile and stonekote; W. C. Lester, Archt., G. W. Larkey, Contr.

Tex., San Antonio—Wm. Church will erect residence in Terrell Hills; Ralph H. Cameron, Archt.; L. W. Tyler, Contr.

Va., Norfolk—Harriet Page Maxfield will erect 2-story frame dwelling in block 1, plat of Algonquin; cost \$12,000; L. McLeod, Contr.

Va., Norfolk—W. A. Howard will erect dwelling in block 30, plat of Larchmont; 7 rooms; brick; cost \$11,000; G. F. Cox, Contr.

Hospitals, Sanitariums, Etc.

Ala., Montgomery—Anti-Tuberculosis League, Dr. Gaston Griel, Prest., will erect hospital on Upper Wetumpka Rd.; 12 units, connected by porches; frame composition shingle roofs; rift pine and tile floors; electric lights; Frederick Ausfeld, Archt.; Cramton Lumber Co., contr. at \$32,700.

Ala., Tuskegee—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., will erect 26 buildings for U. S. Veterans Hospital, colored; 500 beds; Algeron Blair, Montgomery, contr. at \$1,010,000; A. W. Rittenhouse, Washington, D. C., contr. for boilers, electric wiring, plumbing and mechanical equipment, at \$229,866.

Ark., Fort Smith—St. Edward's Infirmary, E. F. Creekmore, Chrmn. Bldg. Comm., will erect building on Little Rock Ave.; cost \$150,000; 28,000 ft. floor area; reinforced concrete and brick; Barrett specification roof; reinforced concrete, tile and Linotile floors; heating, \$14,000; electric wiring, \$5000; elevators, \$8000; A. Klingensmith, Archt.; J. H. Reddick, Contr.

Ark., Little Rock—St. Vincent's Infirmary, 1000 High St., will erect nurses' home at 11th and Bishop Sts.; cost \$70,000; 50 x 106 ft.; 3 stories and basement; accommodate 80; fireproof; reinforced concrete-bearing brick walls; Barrett roof on concrete; hardwood floors over concrete; interior tile; metal ceilings and partitions; vapor heat; Sanders & Ginocchio, Archts., 21-24 Urquhart Bldg.; J. H. Leveck & Son, Contrs., 2600 Battery.

Okl., Oklahoma City—St. Anthony's Hospital will erect nurses' home; cost about \$100,000; 50x100 ft.; fireproof; 3 stories; gymnasium, library, showers; Monnot & Reid, Archts.; Alex Peltier Construction Co., Contr.

Hotels.

Fla., Miami—Jno. T. Campbell will erect bachelors' hotel on N. E. First Ave.; 3 stories; reinforced concrete, hollow tile and stucco; J. W. Bennett, Contr.

Ga., Atlanta—Ansley Hotel will erect addition; cost \$400,000; G. Lloyd Preacher & Co., Archts., Commercial Bank Bldg., Augusta; H. J. Carr & Co., Contrs., Atlanta.

Ga., Augusta—J. B. White Estate and G. L. Miller & Co., Atlanta, will erect Hotel Richmond at Broad St. and Albion Ave.; cost \$600,000; 8 stories and basement; 75x200 ft.; reinforced concrete, limestone, face brick and terra cotta; hardwood and tile floors; 202 guest rooms with bath, convention hall on mezzanine floor to seat 1000, roof garden, 4 stores on lower floor of Broad St. side and 8 stores on Albion Ave. side; 2 passenger and one freight automatic elevators; also erect 2-story building on east side of Albion Ave. for J. B. White & Co. department store; G. Lloyd Preacher & Co., Archts., Augusta, and Healy Bldg., Atlanta; Griffin Construction Co., Contr., Atlanta.

Okl., Texhoma—Texhoma Hotel Assn., Frank A. Sewell, Chrmn. Comm., will erect hotel; cost \$25,000; 50x100 ft.; 2 stories; brick and hollow fireproof tile; Barrett, tar and gravel roof; heating plant, \$5000; city lights; C. D. Patterson, Archts.-Contr., Daltart, Tex.

Miscellaneous.

Tenn., Memphis—Clubhouse—Catholic Club Building Assn., E. F. Longinotti, Secy., will erect clubhouse; 5 stories; fireproof; steel and reinforced concrete; Regan & Weller, Archts., H. J. Kramer, Asso. Archt., Bank of Commerce Bldg.; James Alexander Construction Co., contr. at \$68,932.

Railway Stations, Sheds, Etc.

Tex., Brenham—Gulf, Colorado & Santa Fe Ry., F. Merritt, Ch. Engr., Galveston, will erect freight depot; 2-story head house, 32x36 ft.; warehouse, 32x80 ft.; concrete platform, 32x128 ft.; brick; concrete floors; tar and gravel roof; interior tile; steel rolling doors; gravity steam heat; W. J. Smith, Archt., Galveston; H. D. McCoy, Contr., Cleburne.

Schools.

Ark., Fort Smith—Board of Education, C.

J. Tidwell, Secy., will erect school; cost \$80,000; 1 story; 23,000 ft. floor area; mill construction; brick walls; Barrett specification roof; edge grain pine and concrete floors; steel sash and trim; interior tile; metal doors; heating, \$8000; Chas. W. Dawson, Archt., Merchants Natl. Bank Bldg., Fort Smith, and Barnes Bldg., Muskogee, Okla.; J. H. Reddick, Contr., Fort Smith.

Ark., England—School Board, J. C. Stewart, Supt., will erect high school; 111.7x92.6 ft.; fireproof; brick; built-up roof; wood floors; metal ceilings and doors; H. Ray Burks, Archt., Southern Trust Bldg., Little Rock; Jones & Dusenberry, England, contr. at \$46,900.

Ark., Pine Bluff—Arkansas Boys' Industrial School, Judge W. B. Sorells, Chrmn., Board of Managers will erect dormitory; cost \$22,500; brick; accommodate 40; Chas. F. Dunnington, Contr.

D. C., Washington—National Academy of Sciences, Dr. C. D. Walcott, Prest., will erect building; cost about \$1,000,000; 200x190 ft.; 3 stories; hollow fireproof tile and interior tile; concrete and hardwood floors; metal doors; wire glass; steel sash and trim; vault lights; ventilators; Bertram G. Goodhue, Archt., 2 W. 47th St.; Chas. T. Wills, Inc., Contr., 286 Fifth Ave., both New York.

Fla., Arcadia—Board of Public Instruction will erect grammar school; 10 class rooms and dormitory; brick; Wm. L. Smith & Co., Avon Park, contr. at \$35,229. (Lately noted.)

Fla., Lemon City—Dade County Board of Education, Miami, will erect two 3-story additions to Agricultural High School; 14 rooms; cement blocks and stucco; Umphrey Carpelan, contr. at \$26,361; Biscayne Electric Supply Co., electrical work, both Miami.

Md., Trappe—Talbot County Board of Education, Easton, will erect high school; cost \$34,000; 61x78 ft.; brick and hollow fireproof tile; slag roof; rift pine floors; plaster board; steel sash and trim; Henry P. Hopkins, Archt., 347 N. Charles St., Baltimore; Frank Ross, Contr., Easton.

Miss., Jonestown—Jonestown Consolidated School Dist. Trustees will erect building; cost \$23,000; 6 classrooms and auditorium; brick; composition shingle roof; wood and concrete floors; low pressure steam heat, \$3000; conduit wiring, \$650; Deleo lighting, \$855; Frank P. Gates Co., Archt., Clarksdale, Miss.; Walker Bros., Contrs., Fayette, Ala.; material purchased.

Miss., Schlater—Schlater Consolidated School Dist. Trustees will erect building; S. L. McGinnis, contr. at \$23,300, exclusive of heating, wiring and plumbing; Raymond B. Spencer, Archt., Goodwyn Institute Bldg., Memphis, Tenn.

Mo., Bronaugh—Board of Education, Chas. Steinbeck, Secy., will erect school; cost \$20,000; 2 stories; 60x20 ft.; brick and stucco; pitch and gravel roof; Chas. H. Sudhoelter & Co., Archts., 715 Joplin St., Joplin; Irvin Hale, Contr., 614 Jackson Ave., Joplin.

Mo., Columbia—School Dist. Trustees will erect ward school on Sexton Rd.; 10 classrooms; fireproof; stone trim; hardwood and concrete floors; rolling partitions; hot air heat; electric lights; Robt. E. Peden Co., Archt., New York Life Bldg., Kansas City; Davis & Phillips Constr. Co., Columbia, contr. at \$39,144; Hunt & Stockton, Columbia, plumbing, \$3609; A. Holtman Heating & Ventilating Co., Kansas City, heating and ventilating, \$4703; Gus Girard, Columbia, electric wiring, \$325.

Mo., Rolla—Missouri School of Mines and Metallurgy will erect experiment station; cost \$95,000; concrete and steel; tar and gravel roof; concrete floors; vacuum steam heat; electric lights; Hohenschild, Corrubia

& Henderson, Archts.; MacDonald Construction Co., Contr., both Odd Fellows Bldg., St. Louis.

Mo., Springfield—Board of Education will erect 2 proposed junior high schools; Hawkins & Hoener, Archts.; McDaniel Bldg.; contracts as follows: Brick laying to Ira Ellis, \$10,647; metal work, Auslunger Sheet Metal Co., \$10,877; metal work, Smith Heating & Metal Co., \$10,870; heating for both buildings, J. D. Manely Co., \$25,394.

N. C., Concord—Jackson Training and Industrial School will erect 2 cottages; cost \$20,000 each; 46x52 ft.; 3 stories; brick veneer; slate roof; Jno. R. Query, Contr.

N. C., High Point—Methodist Protestant Church, Board of Education, J. Norman Wills, Secy., Greensboro, will erect college; present plans include administration building to cost \$150,000; 2 stories and basement; 51x180 ft.; Mitchell & Hunter, Archts., Burlington, N. C., and International Bldg., Washington, D. C.; J. L. Crouse, Contr., Greensboro. (Previously noted to expend about \$1,000,000.)

S. C., Abbeville—City Board of Education, W. M. Barnwell, Chrmn., will erect high school; 15 classrooms, physical and chemical laboratories, domestic science and normal training departments, auditorium to seat 700; G. Lloyd Preacher & Co., Archts., Healy Bldg., Atlanta, Ga.; C. H. Van Ormer Augusta, Ga., contr. at \$61,706; Brittingham Plumbing Co., Augusta, heating and plumbing, \$10,709.

S. C., Conway—Board of Trustees, School Dist. No. 19, will erect addition to Burroughs High School; 4 classrooms and auditorium to seat 1000; Chas. C. Wilson, Archt., First Natl. Bank Bldg., Gastonia, N. C., and Columbia, S. C.; Haynesworth & Lawton, Florence, S. C., contrs., at \$46,700.

S. C., Willington—De La Howe State Industrial School, J. E. Branch, Supt., will complete unfinished portion of wing of administration building; also erect metal ceiling over stage portion in present administration building; G. Lloyd Preacher & Co., Archts., Commercial Bank Bldg., Augusta, Ga.; Palmer-Spivey Constr. Co., Augusta, contr. at \$50,000.

Tenn., Paris—Paris Consolidated School Dist. Trustees will erect building on Paris and Springville Rd.; 4 rooms; frame; brick foundation; Z. W. Vaughn, Contr.

Tex., Atlanta—Board of Education will erect 2-story and sub-story and 1-story frame schools; L. F. Alday, Atlanta, and C. Chamberlain, Gastonia, Archts.; Mr. Mate, Dallas, contr. at \$54,850.

Tex., El Campo—School Board will erect high school, ward school and negro school; brick and concrete; C. H. Page & Bro., Archts., Austin; L. T. Wright & Co., San Antonio, contrs. at \$88,116.

Tex., Hillsboro—School Board, Jno. G. Reed, Prest., will erect building; cost \$22,452; 60x80 ft.; 2 stories; brick; tar and gravel roof; edge grain pine floors; jacketed stoves; electric lights; J. O. Galbraith, Archt., Address E. R. Roberts, Contr.

Tex., Leonard—School Board, A. P. Grider, Secy., will erect high school; 2 stories and basement; brick; Sparger & Peters, Archts., Bonham; Young, Allman & Wood, Contrs., Sherman; J. R. Koriath, Sherman, plumbing.

Tex., Nacogdoches—Board of Regents, Texas State Normal Colleges, H. A. Turner, Secy., Texas Bank & Trust Co., Austin, will erect 3-story fireproof administration building at Stephen F. Austin Normal College; 68 1/2 x 250 ft.; reinforced concrete, W. B. Keechum, Archt., Littlefield Bldg., Austin; Moore Construction Co., Brownwood, contr. at \$120,150; Jno. L. Martin, Austin, electric wiring and heating, \$23,448.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Tex., Somerset—School Board will erect building; cost \$20,000; 2 stories; brick and concrete; M. L. Waller & Co., Archts., San Antonio; L. E. Shelton, Contr., Houston.

Tex., Waco—Board of School Trustees, B. B. Cobb, Secy., will erect several buildings, alter and erect additions to other structures; cost \$258,884; Milton F. Scott & Co., Archts.; J. E. Johnson Constr. Co., Contr.; Central Texas Iron Works, contr. for steel at \$17,000; Hill Bros. & Co., heating and plumbing, \$47,356.

Tex., Welasco—Welasco Independent School Board, A. S. Pike, Secy., will erect high school; 9 classrooms, auditorium, gymnasium, library and offices; reinforced concrete, brick and hollow tile; Barrett roof; rift pine and concrete floors; individual classroom heaters; electric lights; Smith & Kelly, Archts., Natl. Bank of Commerce Bldg., San Antonio; Fitch Constr. Co., Brownsville, contr. at \$63,455; Mr. Moore, Donough, plumbing, \$1790; Schroeder Electric Co., San Antonio, electrical work, \$1650.

Va., Suffolk—Board of Education, Jno. E. Martin, Supt. of Schools, will erect Suffolk High School; cost \$100,000; 2 stories and basement; 150x60 ft.; semi-fireproof; brick, concrete and steel; Chas. M. Robinson, Archt., 1003 Times-Dispatch Bldg., Richmond; J. C. Curtis, Contr., Denbigh, Va.

Stores.

D. C., Washington—E. F. Geyer will erect two 1-story brick stores, 3526-28 Connecticut Ave., N. W.; cost about \$10,000; Collegeman Co., Contr.

Fla., Jacksonville—Kohn-Furchgott Co. will

remodel building at Main and Forsyth Sts.; cost \$100,000; provide new fronts including resurfacing walls with brick and installation of show windows; elevator, stairway, etc.; H. J. Klutho, Archt.; W. T. Hadlow, Contr. La., Gibsland—Mrs. M. L. Tatum will erect store and hotel building on First North St.; 2 stories; 27 guest rooms on second floor; electric lights; C. E. Andrews, Contr., Ruston.

La., New Orleans—Jos. Stassi will erect store and residence at Roman and Jena Sts.; cost \$11,315; 2 stories; Peter F. Donnes, Contr.

Mo., Columbia—Missouri Store Co. will erect business building; cost \$50,000; 50x110 ft.; 2 stories and basement; hollow fireproof tile; concrete roof; hardwood and concrete floors; metal doors; wire glass; steel sash and trim; vapor heat; freight elevator; Warren Roberts, Archt., Chilli-cothe; Simon Construction Co., Contr.

Mo., Shelbyville—M. B. Pickett will erect store building; S. P. Glover, Contr.

N. C., Kannapolis—Brown & Bryant have contract to remodel and install elevators in building to be occupied by Kannapolis Hardware Co.

N. C., Kannapolis—Parks-Belk Co. will remodel store; Brown & Bryant, Contrs.

N. C., Stanley—Frank Boyd will erect store building; contract let.

S. C., Camden—B. G. Sanders will erect business building; cost about \$10,000; 1 story; 3 stores; brick; tin roof; cement and wood floors; R. W. Mitchum, Archt.; J. C. Rose, Contr.

Tenn., Memphis—Chas. J. Bauch, Leo Good-

man and I. D. Block will erect store on MeLemore Ave. and Bellevue Blvd.; cost \$20,000; 68x65 ft.; Mahan & Broadwell, Archts.; J. C. Barker, Contr.

Warehouses.

Fla., West Palm Beach—Dade Lumber Co. will erect warehouse on Althea St.; cost \$25,000; 2 stories; 136x117 ft.; semi-fireproof; rick and mill construction; 5-ply built-up roof; metal doors and windows; cement and wood floors; wire glass; steel sash; W. Manly King, Archt.; E. H. Barto, contr. for labor; owner will furnish material.

Ky., Louisville—Belknap Hardware & Mfg. Co., Wm. Heyburn, Prest., will erect warehouse and office building at First and Main Sts.; cost about \$1,000,000; 12 stories; 204x282 ft.; 80,00 sq. ft. space; reinforced concrete; composition roof; cement floors; connected to present buildings by bridges; general offices on 11th floor; cafeteria, assembly rooms, rest rooms, locker rooms and recreational department on 12th floor; also provide for printing office, catalogue department, saddlery factory, etc.; 7 elevators; inside railroad track to accommodate 6 freight cars; also power plant; 84x85 ft.; 1200 H. P. boilers and 800 K. W. generator sets; Graham, Anderson, Probst & White, Archts., 1417 Railway Exchange Bldg., Chicago; Struck Construction Co., Contr., Louisville.

Md., Baltimore—Harry J. Mohr, 624 W. Lexington St., will erect warehouse at 200 Pearl St.; cost \$10,000; 26.4x77.7 ft.; slag roof; Martin Koenig, Jr., Archt., 4712 Groveland Ave.; Consolidated Engineering Co., Contr., Calvert Bldg.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Art Glass.—Rev. John B. Hudson, Pastor, First Presbyterian Church, Victoria, Tex.—Art glass windows.

Boring Machines.—Everton Mining & Development Co., Everton, Ark.—Prices on boring machines suitable for corn cob pipes.

Brick Colors.—Camp B. Stone, Cedar Bluff, Ark.—Glazed brick colors. (See Paints, etc.)

Brick (face).—John R. Pender, Jr., Pender Hdwe. Co., Tarboro, N. C.—Face brick.

Brick.—J. V. Castleberry, Ordinary, Lumpkin, Ga.—Brick.

Bridge Construction.—Scott County Board of Supvrs. R. M. Addington, Clk., Gate City, Va.—Bids until May 19 to build 2 steel or concrete bridges over Stock Creek at Sun-bright and Clinchport; plans, etc. on file.

Bridge Construction.—Noxubee County, Board of Supvrs., Jno. A. Tyson, Chaucery Clk.—Bids until June 6 to build steel and concrete bridge over Hashugua Creek, on Macon and Louisville Road, 8 mi. west of Macon; No. 145 (No. 1), No. 146 (No. 2); plans, etc. on file, at Macon, Ga.

Bridge Construction.—State Road Comsn., E. B. Carskadon, Secy., Charleston, W. Va.—Bids until June 6 to build 2 bridges, Nos. 568 and 700; 70-ft. span pony truss each; concrete substructures; Ohio County, Project 120; plans, etc. on file, or from Div. Engr., Parkersburg, W. Va.

Bridge Construction.—Orange County Commrs., B. M. Robinson, Clk., Orlando, Fla.—Bids opened May 18 to build bridges and culverts along Orlando-East Coast road, between Orlando and St. Johns River; 2000 cu. yds. concrete; 66,000 lbs. steel reinforcement; plans, etc., from Chas. A. Browne, Ch. Engr.

Bridge Construction.—Montgomery County Building Trustees, W. B. Hicks, Chrmn., Blacoe, N. C.—Bids opened May 17 to build

bridge across Little River where Troy-Pekin road crosses river; 3 span, 280x16 ft. steel bridge on concrete abutments and piers; plans, etc., from L. V. Edwards, Const. Engr., Troy, or Masonic Temple Bldg., Winston-Salem, N. C.

Bridge Construction.—Harris County, H. L. Washburn, County Auditor, Goose Creek, Tex.—Bids until May 22, to build bridge across Goose Creek on Baytown-Goose Creek road; steel girders; plans, etc. from County Engr.

Bridge Construction.—State Highway Dept., Jefferson City, Mo.—Bids until May 18 to build bridge on State road from Trenton eastward, over Honey Creek Drainage Dist.; Sta. 764 plus 60; 100-ft steel truss span, concrete floor; 18-ft. roadway; 2 reinforced concrete bents on reinforced concrete piling.

Over Honey Creek, on State road from Trenton eastward; Sta. 752 plus 50; 60-ft. steel truss span; concrete floor; 18-ft. roadway; two 20-ft. reinforced concrete slab spans; 2 concrete piers; 2 reinforced concrete bents.

Over Muddy Creek, on State road from Trenton eastward, Sta. 629 plus 25; 60-ft. steel truss span, concrete floors; 18-ft. roadway; two 20-ft. reinforced concrete slab spans; 2 concrete piers; 2 reinforced concrete bents.

Over Muddy Creek Drainage, on State road from Trenton eastward, Sta. 625 plus 43; 100-ft. steel truss span, concrete floor; 18-ft. roadway; 2 reinforced concrete bents on reinforced concrete piling; all Grundy County, Federal Aid Project No. 116, Section B; A. C. Lingley, Div. Engr., Ballinger Bldg., St. Joseph, Mo.

Bridge Construction.—State Highway Department, Jefferson City, Mo.—Bids opened May 11 to build bridge over Hickory Creek on State road from Neosho to Granby Sta.

954 plus 68; 80-ft. pony truss span; concrete floor; 2 reinforced concrete abutments; 18-ft. roadway; Newton County, Federal Aid Project No. 182; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo.

Bridge Timbers.—W. A. Leland, Ch. Engr., Carolina Engineering & Contracting Co., Johnson City, Tenn.—Prices on bridge timbers.

Building Materials.—C. M. Gravatt, Mgr., Felstone Co., 316 Haywood Bldg., Asheville, N. C.—Prices on all kinds of building materials, including cement.

Building Materials.—W. A. Leland, Ch. Engr., Carolina Engineering & Contracting Co., Johnson City, Tenn.—Prices on brick, cement, structural steel.

Building Material.—J. V. Castleberry, Ordinary, Lumpkin, Ga.—Metal ceilings, plaster board, metal doors, wire glass, concrete brick, lime, steel (reinforcing), etc.

Building Material.—Johnson & Fonda, Bradentown, Fla.—Catalogs and literature on building material.

Building Material.—M. A. Long Co., 1523 Munsey Bldg., Baltimore, Md., is estimating on Huntington Ave. Baptist Church, Baltimore, and desires sub-bids and estimates until May 24.

Building Supplies.—E. E. Fordham, 529 N. Columbia St., Alexander, Va.—Prices on building supplies, such as hardware, bath fixtures, etc.

Cement.—Moore Construction Co., Brown-wood, Tex.—Cement for \$130,000 school; 3 stories; 68½ x 250 ft.

Cement.—See Building Materials.

Cement.—Bidd County Commrs., J. Ross Bowdre, Clk., Court House, Macon, Ga.—Bids until May 16 to furnish 17,000 bbls. of cement to be used in paving Clinton and Jefferson rds.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Chute (Clothes).—W. E. Hulse & Co., Archts., Hutchinson, Kan.—Sanitary clothes chute.

Clay Working Machinery.—Buckhannon Brick Co., Buckhannon, W. Va.—Hollow block and drain tile machine, capacity 8000 to 10,000; must be in good condition if second-hand.

Circular Saws.—Everton Mining & Development Co., Everton, Ark.—Prices on circular saws suitable for corn cob pipes.

Coal.—Kentucky Normal & Industrial Institute, Frankfort, Ky.—Bids until May 20 to furnish 700 tons nut and slack coal; 300 tons mine run coal; 200 tons lump coal; f. o. b. Kentucky.

Coal.—Dist. Engr.'s Office, Mississippi River Dredging Dist., U. S. Dredge Depot, Memphis, Tenn.—Bids until May 18 to furnish and deliver 7000 tons of coal in barges; further information on application, Box 1017.

Concrete Machinery.—C. M. Gravatt, Mgr., Felstone Co., 326 Haywood Bldg., Asheville, N. C.—Prices on all kinds of concrete mchy.

Concrete Tile Machinery.—J. H. Parsons, Box 366, Talladega, Ala.—To correspond with mfrs. of concrete tile mchy., particularly of the Spanish Mission type.

Concrete Work.—Steuart Colliery Co., Macdonald, W. Va.—Invite bids to concrete 600 ft. deep mine shaft, damaged by explosion; mine located at Summerlee, W. Va.

Crushed Glass.—A. W. Hilton, Mgr., Clinchfield Pottery Works, Marion, N. C.—Correspondence with dealers in fine crushed glass used for glazing.

Drags.—See Paving Equipment.

Drainage.—Locust Creek Drainage Dist., E. B. Field, Secy., Linneus, Mo.—Bids opened May 16 to construct main ditch, 1st division.

Drainage.—Sugar Bowl Drainage Dist. Commrs., A. J. Beck, Secy., Bradentown, Fla.—Bids until May 15 to construct improvements to district; plans with Craven & Kimmel, Civil Engrs.

Drilling (Well) Outfits, etc.—Geo. O. Butler, West Palm Beach, Fla.—To purchase well drilling outfit or to contract for drilling artesian wells to irrigate farms.

Drill Press.—Ted. S. Maitland, Box 433, Joplin, Mo.—To purchase drill press.

Dryer (Tobacco).—R. M. Pool, Princeton, Ky.—Dryer for 20,000,000 lbs. capacity, tobacco plant.

Electrical Equipment.—Oxford Utilities Comsn., Oxford, Md.—Bids until June 1 on additional electric unit, erected complete, bids asked separately on 25 H.P., 37½ H.P. and 50 H. P. Fairbanks-Morse, type "Y" alternator, exciter and switchboard; also internal combustion fuel oil engine.

Electrical Fixtures.—State Bond Improvement Comsn., Jackson, Miss.—Bids until May 20 for electrical fixtures for engineering bldg. Mississippi A. and M. College; Theo. C. Link, Suppl. Archt., Box, 636.

Electric Plant Equipment.—City of Burbank, Okla., Geo. Shell, Chrmn.—Prices on electric plant equipment.

Elevator, etc.—W. E. Hulse & Co., Archts., Hutchinson, Kan.—Elevator, 5.6 x 7.6 ft., travel 20 ft.; also dumb waiter.

Elevators.—R. M. Pool, Princeton, Ky.—Elevators for tobacco re-drying plant.

Engine (Oil).—Roaring Spring Marl Lime Co., R. M. Janney, Gloucester, Va.—New or second-hand crude oil burning engine for 20 ton capacity marl lime plant.

Engine (Fuel Oil).—Oxford Utilities Comsn., Oxford, Md.—Bids until June 1 on internal combustion fuel oil engine, Fairbanks-

Morse type Y. (See Electrical Equipment.)

Fire Engines.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until May 19 to furnish 2 chemical, hand drawn fire engines and 12 additional charges therefore, for Depot Quartermaster, 1st. Brigade, Haiti; delivery Naval Operating Base, Hampton Roads, Va.; plans on file; Sch. 355.

Furniture (Church).—Rev. John B. Hudson, Pastor, First Presbyterian Church, Victoria, Tex.—Church furniture.

Gas System.—Town of Wister, Okla., J. M. Henry, Clerk.—Bids until May 15 for material, equipment and machinery necessary to install complete gas system; work consists of approximately: 7½ mi. of 3-in. lap welded pipe, 1 mi. 2-in. butt welded pipe, 3 mi. of 1-in. butt welded pipe, one 3-in. meter, two 2-in. meters, 150 1-in. meters, 150 1-in. globe valves, 150 gas service cocks, 150 15-in. curb boxes, 150 1-in. regulators, six 3-in. valves and boxes, four 2-in. valves and boxes, 200 1-in. tees, other specials; plans and specifications on file at office of Town Clerk.

Generator Sets.—W. P. Davis, Pampa Water, Light & Power Co., Pampa, Texas.—Prices on 75 H. P. Diesel oil engine, 75 to 100 K. W. generator 900 R. P. M. 60 cycle, 3 phase, 2300 volts, will consider second hand machines in good condition.

Generator Sets.—City of Benton, Ark., G. A. Smith, Engr., Water and Light Commission.—Prices on 210 K. V. A. unflow engine and generator 125 lb. steam pressure, atmosphere exhaust, 2300 volts, 3 phase, 60 cycle.

Gravel.—Clark County Board of Supvgs., Quitman, Miss.—Bids until June 6 to furnish approx. 20,000 tons surfacing gravel to use on Project 129; plans with H. C. Dietzer, State Highway Engr.

Heating Plant.—Rev. John B. Hudson, Pastor, First Presbyterian Church, Victoria, Tex.—Heating plant.

Hoisting Drums.—Roaring Springs Marl Lime Co., R. M. Janney, Gloucester, Va.—Hoisting drums for 20 ton capacity marl lime plant; new or second-hand.

Iron (Corrugated, Galvanized).—White Oak Corp., Box 1094, Knoxville, Tenn.—200 squares corrugated galvanized iron, 28 gauge, consider second-hand material if in good condition; quote prices delivered Knoxville.

Jail Supplies, etc.—J. W. Lambert, Contr., Grundy, Va.—To correspond with mfrs. of jail supplies, including cages, cells, etc.

Knitting Machines.—A. M. Young, 1036-3rd. St., San Diego, Cal.—Prices on spring needle knitting machines.

Lead.—Camp B. Stone, Cedar Bluff, Ark.—Lead. (See Paints, etc.)

Leather Belts.—W. P. Davis, Pampa Water, Light & Power Co., Pampa, Tex.—Prices on 2 and 3 ply leather belt for power plant.

Lime.—J. V. Castleberry, Ordinary, Lumpkin, Ga.—Building lime.

Locomotives.—Pennsylvania Equipment Co., Norwood, Penna.—40-50 ton standard gauge saddle tank locomotive, 4 drivers, Illinois delivery; combination freight and passenger locomotive, to make 8½ mi. run, including 4 station stops in 22 min., for freight service engine should handle from 12 to 14 loaded freight cars, bridges limited to 80 tons; for Eastern delivery; second-hand equipment.

Lumber.—E. E. Fordham, 529 N. Columbia St., Alexandria, Va.—Prices on lumber in carload lots.

Mill Work.—Moore Construction Co., Brownwood, Tex.—Mill work for \$130,000 school.

Mining Machinery.—A. S. Petrey, Mgr., New Duane Coal Co., Hazard, Ky.—Coal mining mchy. for 2 car daily output mine.

Molding Machinery.—A. W. Hilton, Mgr., Clinchfield Pottery Works, Marion, N. C.—Correspondence with firm dealing in machinery for molding flower pots vases and earthenware.

Oil (Linseed).—Camp B. Stone, Cedar Bluff, Ark.—Linseed oil. (See Paints, Etc.)

Oven (Enamel, Bake).—W. J. McLaughlin, 104 Habana Ave., Tampa, Fla.—Bake over for baking enamel on sheet metal, such as automobile fenders, hoods, etc.; correspond with mfrs.

Paints, etc.—Camp B. Stone, Cedar Bluff, Ark.—Paint, glazed brick colors, linseed oil and lead.

Paint.—Port of New Orleans Commrs., J. H. Walsh, Gen. Mgr., New Orleans Court Bldg., New Orleans, La.—Bids until May 18 to furnish 2500 gals. olive green paint and 2500 gals. yellow paint; information from Supvr. of Purchases, 1 Canal St.

Paving.—City, E. C. Garvin, Director Public Works, St. Petersburg, Fla.—Bids opened May 15 to construct about 110,000 yds. street improvement; brick or asphalt block on sand foundation; and relay with brick 17,000 yds.; J. B. Parsons, Engr.

Paving.—City, P. A. George, Mayor, Roncove, W. Va.—Bids opened May 16 to construct concrete sidewalk street crossings on Chestnut St. on south side Greenbrier Ave.; and concrete sidewalks on south side Greenbrier Ave.; plans etc., from A. S. Woodhouse, City Clk.

Paving, etc.—City of Clarksburg, W. Va.—Bids until May 23 to furnish material and labor to lay 3500 lin. ft. curb, 680 sq. yd. brick paving, 1150 cu. yds. concrete base, 350 ft. 15-in. storm sewer and 200 ft. 12-in. storm sewer, 3 manholes and 6 inlets; D. H. Hamrick, City Clk.

Paving.—City, J. N. Landers, Pur. Agt., Atlanta, Ga.—Bids opened May 15 to pave following streets: Glenn Greencove, DeLeon and Irenen Sts.; Clifton, Euclid, and Dixie Aves.; Virginia Circle; Clement Drive; plans, etc., on file.

Paving.—City, S. E. Livingston, Mayor, Homestead, Fla.—Bids until May 24 for street improvement; 115,000 sq. ft. sidewalk; 7,400 lin. ft. curb and gutter; necessary drainage; plans, etc., from R. E. Edwards, Clk., or B. M. Duncan, Engr.

Paving.—City, John W. Kelleam, Mayor, Robstown, Tex.—Bids until May 19 to construct concrete and gravel pavements in certain streets; plans, etc., on file, from C. W. Homeyer, Robstown, or from E. E. Sands, Consult. Engr., 421 Mason Bldg., Houston, Tex.

Paving.—City, Board of Public Service, St. Louis, Mo.—Bids until May 23, to reconstruct Carr St. from 14th to Jefferson Ave.; plans, etc., on file.

Paving.—City, Ada. D. Stetler, Clk., Kingfisher, Okla.—Bids until May 22, to grade and construct one course cement concrete paving, curb and gutter; Roberts Ave., 2120.3 sq. yds. pavement; 587.7 lin. ft. curb and gutter; Admire Ave., 7366.4 sq. yds. pavement, 640 lin. ft. 6 and 8-in. curb and gutter; 6th St., 6663.9 sq. yds. pavement, 4565.6 lin. ft. 6 and 8-in. curb and gutter; Miles Ave., 5591.8 sq. yds. pavement, 1040.4 lin. ft. 8-in. curb and gutter; plans, etc., on file, or from Black & Veatch, Mutual Bldg., Kansas City, Mo.

Paving.—Town, Board of Aldermen, Rockingham, N. C.—Bids until May 23 to pave and improve certain streets; 45,000 sq. yds.

plain cement concrete, reinforced cement concrete, sheet asphalt bitulithic or asphaltic concrete pavement on five-inch Portland cement concrete base; 40,000 lin. ft. combination concrete curbs and gutters, or granite curb, storm drains, etc.; plans, etc., from W. Steele Lowdermilk, Mayor, or from Mees & Mees, Consulting Engineers, Charlotte, N. C.

Paving.—City Mgr., Lynchburg, Va.—Bids opened May 13 to improve concrete sidewalks on Dearing St., and Garfield and Rivermont Aves.; plans, etc., on file.

Paving.—Frank W. Ashley, Mayor, Chillicothe, Mo.—Bids about June 5 to repave streets; Jo. Braddus, City Engr.

Paving Equipment.—Marion County, E. B. Lewis, County Judge, Jefferson, Tex.—Paving equipment, including road oiling equipment, drags, rock crushers.

Paving Materials.—City, Grant Reid, Chrmn., Street Comm., Covington, Tenn.—Paving materials, including cement, stone and sand.

Piling.—Pace Drainage Dist. Comms., Cleveland, Miss.—Bids until May 22 to furnish and install approx. 700 ft. sheet piling at outlet of ditch No. 1; W. W. Boone, Engr.

Pipe (Cast Iron) and Fittings.—Wm. F. Broening, Prest., Board of Awards, Baltimore, Md.—Bids until May 17 to furnish and deliver cast iron pipe and fittings to Water Dept.; Richard Gwinn, City Register; plans with Wm. A. Megraw, Water Engr., Room 207, City Hall.

Pipe (Wrought Steel).—Texas Supply Co., Box 1777, Houston, Tex.—Large quantity of wrought steel pipe, 1 to 12-in.; new or second-hand.

Pipe, Fittings, etc.—City of Clearwater, Fla.—Bids until June 7 for following: 16,500 ft. Class B. bell and spigot cast iron pipe; 9000 lbs. special fittings; 23 fire hydrants; 2 gate valves and boxes; for further information address Frank Schwabel, Supt. Water Dept.

Plumbing Fixtures.—State Bond Improvement Comsn., Jackson, Miss.—Bids until May 20 for installing plumbing fixtures for 2 Hydro-Therapeutic Dept., East Mississippi Insane Hospital, Meridian, Miss.; Theo. C. Link, Supv. Archt., Box 636, Jackson.

Portable Building.—Iddins Machinery Co., Central and Jackson Sts., Knoxville, Tenn.—Second-hand steel structural building for a lot 50 x 150 to 165 ft. in length.

Press (Printing).—Phil L. Keener, Editor of Baxter Spring Herald, Baxter Springs, Kans.—Printing press.

Printing (Job) Outfit.—E. P. Larman, Haleyville, Ala.—Prices on small job printing outfit.

Printing.—City of Houston, Tex., O. F. Holcombe, Mayor.—Bids until May 15 for printing of municipal book, City of Houston; information obtainable from City Mgr.

Pump (Fire).—F. B. Cole, Consult. Engr., Box 563, Newman, Ga.—New or second-hand, underwriter 1000 gal. capacity fire pump, electric driven, 3 phase, 60 cycle, 550 volts.

Radio Phones.—A. B. Jarrell, Williston, Fla.—To correspond with mfrs. of radio-phones.

Road Construction.—St. Francis County, Road Improvement Dist. No. 2, Forrest City, Ark.—Bids opened May 17 to improve certain roads; 105,600 lin. ft. preparing sub-grade; 20,000 tons gravel; plans, etc., from W. M. Goodbar, Secy., R. A. Kern, Engr.; both Forrest City; or from State Highway Comsn., Little Rock.

Road Construction.—Okeechobee County Comms., W. W. Potter, Chrmn., Okeechobee,

Fla.—Bids opened May 15 to construct following:

Bassenger road, 18 mi. from State Road No. 8 through Bassenger to Kissimmee River.

Jupiter Road, 6 mi. from point near Nubbens Slough, and extending southeast to County line; clear and grub; construct road embankment; build small bridges and culverts; 8-ft. marl surface; plans, etc. from C. E. Simmons, County Clk.

Road Construction.—Ouachita Parish Police Jury, Road Dist. No. 1, Monroe, La.—Bids until June 7 to construct following highways with gravel surface or Moore invincible Track:

Monroe-Jonesboro highway, 9 mi.

Columbia Extension, 2 mi.; etc., from H. C. Daigre, Parish Engr.; Louisiana Highway Comsn's specifications govern work.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids until May 18 to construct 5.879 mi. State road from Trenton eastward; grade and construct drainage structures; Grundy County, Federal Aid Project No. 116, Section B; A. C. Lingley, Div. Engr., Ballinger Bldg., St. Joseph, Mo.

Road Surfacing Material.—J. B. Peek, County Judge, Beaumont, Tex.—Bids until May 22 for unloading, hauling, placing and spreading of surface material on certain highways in Jefferson County; further information obtainable from A. C. Love, County Engr.

Road Construction.—Morgan County Court, M. S. Harmison Clk., Berkeley Springs, W. Va.—Bids until June 12 to construct 9½ mi. road in Cacapon Dist.; plans, etc. on file or from S. H. Lea, Dist. Engr.

Road Construction.—Letcher County Fiscal Court, Whiteburg, Ky.—Bids until May 31 to re-build grade work on Sandlick road, and other sections of road.

Road Construction.—Hinds County Highway Comsn., Learned Road Dist., H. D. Gibbs, Chrmn., Jackson, Miss.—Bids until June 6 to construct 3½ mi. road; gravel surface; concrete headwalls of culverts; plans, etc., from Chancery Clerk, Hinds County, Raymond, Miss.; and Engr. at Learned, Miss.

Road Construction.—McDowell County, Highway Comsn., Hugh F. Little, Chrmn., Marion, N. C.—Bids open May 15 to construct 5.5 mi. county highway; J. L. Martin, County Engr.

Road Construction.—Louisiana Highway Comsn., Maison Blanche Annex, New Orleans, La.—Bids until May 22 to surface with shells 25.42 mi. Houma-Morgan City Highway; Terrebonne Parish; plans, etc., on file, or from J. M. Fourny, State Highway Engr.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids until June 6 to construct road between Excelsior Springs and Liberty; R. J. Windrow, Special Highway Engr.

Road Construction.—State Highway Dept., Columbia, S. C.—Bids until June 1 to construct 5.3 mi. Charleston-Columbia Highway, between end Federal Aid Project No. 22 and Goose Creek; Charleston County, Federal Aid Project No. 153; 55,968 sq. yds. plain concrete surfacing; plans, etc., from J. W. Martin, Engr., for Sanitary and Drainage Comsn., 39 Broad St., Charleston, and from Chas. H. Moorefield, State Highway Engr., Columbia.

Road Construction.—Oklahoma County Comms., Ed. S. Butterfield, Chrmn., Oklahoma City, Okla.—Bids until May 15 to improve State roads in sections Nos. 6, 10, 13 and 20; grade, pave and construct culverts

and bridges, plain cement concrete; asphaltic concrete; rock asphalt; vertical fibre brick; plans, etc., from County Engr.

Road Construction.—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until May 23 to construct 3.9 mi. State Highway from end of Cont. No. G-19, to Kaese's Mills; Garrett County, Cont. No. G-20.

Road Construction.—Scott County Board of Suprvs., R. M. Addington, Clk., Gate City, Va.—Bids until May 19 to grade and drain following:

Wildcat Valley Road, 3.5 mi. from Duffield to Lee County Line.

Fincastle Road, 5.5 mi. from Dekalb to M. J. Lane's.

Fusee Road, 4.3 mi. from W. H. Ashworth to M. J. Lane's.

Cove Road, 1.2 mi. from Bellamy's store to Spivey's Mill.

Hunter Valley Road, 3.2 mi. from Horton's Summit to Mabe; plans, etc. on file.

Road Construction.—State Highway Dept., Jefferson City, Mo.—Bids opened May 17 to construct following roads:

Taney County, 2.434 mi. State road from Forsyth southward; grade and construct drainage structures; Taney County, State Aid Project No. 20,150.

Taney County, 587 mi. State road from Forsyth to Branson; grade and construct drainage structures; Taney County, Federal Aid Project No. 163; H. P. Mobberly, Div. Engr., Woodruff Bldg., Springfield, Mo.

Road Construction.—McLennan County, J. P. Lester, County Judge, Waco, Tex.—Bids opened May 16 to construct 10.57 mi. State Highway No. 7; 20,818 cu. yds. gravel surface; Mantam Hannah, County Engr.

Road Construction.—Montgomery County Highway Trustees, W. B. Hicks, Chrmn., Biscoe, N. C.—Bids opened May 17 to construct 12 mi. top soil road; plans, etc., from L. V. Edwards, Consult. Engr., Troy, or Masonic Temple Bldg., Winston-Salem, N. C.

Road Construction.—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until May 23 to construct roads in following:

Maryland—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md., will construct roads in following:

Howard County, 3 mi. State Highway from end of Cont. No. Ho-23, toward Montgomery County line; Cont. HO-21; concrete. Baltimore County, 2 mi. State Highway along Park Heights Ave., from end Cont. No. B-41 to Caves Road; Cont. No. B-51; macadam resurfacing.

St. Mary's County, 3.48 mi. State Highway from end of Cont. SM-15 to Colton, Cont. No. SM-16; gravel.

Cecil County, .91 mi. State Highway from Rowlandsville toward Five Points; Cont. No. CE-39; concrete.

Road Machine.—J. G. Bright, Jefferson, N. C.—Road Machine for 20 mi. road construction.

Road Oiling Equipment.—See Paving Equipment.

Rock Crushers.—See Paving Equipment.

Roller (Road).—Temple Terraces, Inc., Citrus Exchange Bldg., Tampa, Fla.—10-ton road roller, 3 wheel type, gas or steam; good running condition; state best price, giving full particulars.

Screen Door Machinery.—Florida Fly-Exit Screen Co., 316 Graham Bldg., Jacksonville, Fla.—Bids about Aug. 1 for machinery for mfr. of screen doors.

Sewer and Water Construction.—City of Center, Tex., O. H. Polley, Mayor.—Bids until May 23 to construct sewer and water system; specifications on file at office of J. W. Shotwell, City Mgr. or at office of E. F.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Sands, Const. Engr., 421 Mason Bldg., Houston.

Sewer Construction.—City, J. N. Landers, Pur. Agt., Atlanta, Ga.—Bids until May 15 to furnish all labor, materials and construct sewers in Group No. 2; specifications from Pur. Agt.

Sewer Construction.—City of Ashland, Ky., W. M. Salisbury, Mayor.—Bids until May 15 for constructing brick sewer 54-in. in diam.; 2 ring brick sewer, 2400 lin. ft.; 8 manholes, 3 24-in. inlets, 16 12-in. inlets, 23 6-in. inlets, 2 street curb inlets, 2400 lin. ft. trench. Also opens bids May 15 to construct sanitary pipe sewer, approx. quantities 2390 lin. ft. trench, 110 lin. ft. 18-in. pipe, 1390 lin. ft. 15-in. pipe, 890 lin. ft. 12-in. pipe, two 18x8-in. Y's, 8 15x8-in. Y's, 5 12x8-in. Y's, 40 15x6-in. Y's, 30 12x6-in. Y's, 8 manholes, plans and specifications on file at office of City Engr.; H. L. Carroll, City Clerk.

Sewer Construction.—City of Robstown, Tex., John W. Kellam, Mayor.—Bids open May 19 to construct sewers; specifications on file at office of Mayor, office of C. W. Homeyer, Robstown, or office of E. E. Sands, 421 Mason Bldg., Houston, Texas, Const. Engr.

Sewer Construction.—City of Ronceverte, W. Va., P. A. George, Mayor.—Bids until May 29 to construct storm water sewer outlet; approximately 280 ft. 18-in sewer pipe and excavation; approximately 410 ft. of 24-in. sewer pipe, specifications on file at office of City Clk.

Sewer Construction.—Commsn. of Public Works, H. A. Pulliam, Comms., Paducah, Ky.—Bids until May 31 to construct trunk line sewer and appurtenances, monolithic reinforced concrete, concrete pipe, segment block, cast iron pipe, brick or vitrified clay, Contract No. 1 and No. 2.

Sewer Construction.—City of Tulsa, Okla., Roy Garbett, Auditor.—Bids until May 15 to construct sanitary sewer in Sewer Dist. No. 183; plans and specifications on file at office of city engineer.

Sewer Construction.—City of Louisville, Ky., Geo. T. Wood, Chrmn., Comms. of Sewerage.—Bids until May 23 to construct following sewer; approx. quantities—for Speed Ave. drain, 825 lin. ft. 51-in., 837 lin. ft. 48-in., 496 lin. ft. 45-in., 194 lin. ft. 24-in., 218 lin. ft. 21-in., 255 lin. ft. 15-in.; for sewer: 2158 lin. ft. 12-in., 667 lin. ft. 8-in., for Forty-fourth St. and Parker Ave sewer: 1780 lin. ft. 45-in., 310 lin. ft. 39-in., 30 lin. ft. 36-in., 690 lin. ft. 30-in., 240 lin. ft. 18-in.; specifications on file at office of Commsn, 417 W. Ma InSt.; J. B. F. Breed, City Engr.

Steel.—Moore Construction Co., Brownwood, Tex.—Steel for \$130,000 school; 3 stories; 68½x250 ft.

Sewer Construction.—City of Albany, Ga.—W. H. Coleman, Director of Pub. Works.—Bids opened May 15 to construct sanitary sewer; following quantities of terra cotta sewer pipe: 2000 lin. ft. of 27-in., 2100 lin. ft. of 8-in., 540 ft. of 12-in., 800 lin. ft. of 10-in.; 17 standard manholes, 3 standard flush tanks; plans, etc., from office of Director of Public Works.

Sewer Construction.—City of Tulsa, Okla., Roy Garbett, Auditor.—Bids until May 15 to construct sanitary sewer including laterals, connections, etc.; plans and specifications on file at office of City Engr.

Sewer Construction.—Town of Potomac, Va.—Bids until May 18 to furnish sewer pipe and construct sanitary sewers; approx. 30,000 cu. yds. of trench excavation, 36,000 lin. ft. 8-in. sewers, 500 lin. ft. 10-in., 4600 lin. ft. 12-in., 700 8-in.x6-in. Y branch house connections and 85 manholes; plans at office of

David J. Howell & Son, Washington, D. C., Engrs.

Sewer Construction.—City of Burbank, Okla., Geo. Sheel, Chrmn.—Prices on sewer construction.

Sheet Metal Tools.—L. B. Jones, Mgr., Mo-Jo-Filter Co., Rockdale, Tex.—Prices on press machines, gigs dies, turners tools, etc.

Sheet Metal Working Machine.—Janney & Co., Montgomery, Ala.—To purchase machine for pressing small parts about 6x12-in.

Steel (Reinforcing).—J. W. Castleberry, Ordinary, Lumpkin, Ga.—Steel (reinforcing).

Stone.—Moore Construction Co., Brownwood, Tex.—Crushed stone for \$130,000 school; 3 stories; 68½x250 ft.

Viaduct Construction.—City, O. F. Holcombe, Mayor, Houston, Tex.—Bids until June 4 to build reinforced concrete viaduct on Crockett St., crossing White Oak Bayou and M. K. and T. Ry.; eleven 50-ft. spans; retaining wall approaches; 35-ft. roadway; two 6½-ft. sidewalks; plans, etc., from City Engr.

Tank (Fuel Oil).—Oxford Utilities Comsn., Oxford, Md.—Bids until June 1 for 10,000 gal. steel tank, horizontal type.

Tank (Water).—City of Clearwater, Fla.—Bids until June 7 on 300,000 gal. elevated water tank or stand pipe of same capacity; for further information address Frank Schwabel, Supt. Water Dept.

Tank (Sulphuric Acid).—Dominion Textile Co., 112 St. James St., Montreal, Canada.—To purchase 100,000 lbs. capacity sulphuric acid tank, lined with glass or similar substance in preference to all iron; to correspond with mfrs.

Tape (Steel, Surveyor).—F. G. Willis, Engineer, Military Ave., Baxter Springs, Kans.—Steel tape for surveyor's use.

Textile Machinery.—J. E. Freeman, Shreveport, La.—To correspond with mfrs. of machines to make knit neck ties and silk hosiery.

Tin.—White Oak Corp., Box 1094, Knoxville, Tenn.—To correspond with mfrs. of tin work such as screw caps for oil cans, etc.

Textiles.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Bids until May 22 to furnish 40,000 yds. khaki webbing, 50,000 yds. yellow silk lace, 20,000 yds. bur-lap, 75 silk guidons, 9000 hand towels and 20,000 yds. crash toweling; delivery U. S. Marine Corps, Philadelphia, Pa.; Sch. 343; information on application to office of Depot Quartermaster, 1100 S. Broad St., Philadelphia.

Trucks.—R. M. Pool, Princeton, Ky.—Trucks.

Truck.—Howard Bryant, Acting Prest. Bd. of Awards, Baltimore, Md.—Bids until May 24 to furnish for use of Electric Commission 5-ton dump body truck with the exchange of 3½-ton White dump body truck; Richard Gwinn, Register, City Hall; for specifications and further information apply to Charles F. Goob, Chief Engr., City Hall Annex No. 1, 311 Courtland St.

Turning Lathes.—Everton Mining & Development Co., Everton, Ark.—Prices on turning lathes suitable for corn cob pipes.

Valves.—Wm. F. Broening, Prest., Board of Awards, Baltimore, Md.—Bids until May 17 to furnish and deliver valves to Water Dept., Richard Gwinn, City Register; plans with Wm. A. Megraw, Water Engr., Room 207, City Hall.

Vault Lights.—J. V. Castleberry, Ordinary, Lumpkin, Ga.—Vault lights.

Water Equipment.—City of Burbank, Oklahoma, Geo. Sheel, Chrmn.—Prices on water equipment.

Water Meters.—Dept. of Public Utilities, 109 City Hall, Richmond, Va.—Bids until May 29 to furnish water meters; E. W. Trafford, Director.

Water Works.—City of Jacksonville, Fla.—Frank H. Owens, Chrmn., City Comsn.—Bids until May 25 to construct two circular concrete aerating basins and concrete slab cover over existing aerating basin in water works park; plans, etc., on application to City Engr., Engineer Bldg.

Water Works.—Town of Seabreeze, Fla., J. R. Tomilson, Chrmn., Town Council.—Bids until May 22 for following approx. quantities: 21,000 ft. of 6, 8, 10-in. cast iron pipe, 60 6, 8, 10-in. gate valves, one motor driven pumping unit 250 gal. capacity, one gas or oil engine pumping unit 500 gal. capacity, 2 motor driven pumping units each 400 gal. capacity; one 75,000 gal. steel tank upon 125 ft. tower; furnishing and constructing foundations and also building for pumping plant, carting pipe and materials by ton, laying cast iron pipe, finishing two 6-in. artesian wells, one softening plant, 1 incinerator; plans and specifications furnished by C. M. Rogers, Daytona, Fla., Engr.

Water Works.—Carolina Engineering Co., 412 Southern Bldg., Wilmington, N. C., Engrs. for City of Wilmington's water supply extensions and improvements, including 2 mi. of 36" pipe line and river crossing 40 ft. under Cape Fear River—Invites correspondence from contractors having constructed work similar to this.

Water Works.—City of Oklahoma City, Okla., C. F. Semmelbeck, Clk.—Bids until May 23 for placing of gunite protection on banks at city reservoir for following amount of gunite protection and all other work incidental thereto: earth excavation, 45,000 cu. yds., earth backfill, 200 cu. yds., 297,000 sq. ft. of 3-in. gunite bank protection; 10,850 lin. ft. of granite top wall, 33,000 sq. yds. earth bank trimmings, 10,000 lin. ft. Class A sheeting, 2-in. yellow pine, 7000 lin. ft. of Class C sheeting, 6-in. Wakefield yellow pine; specifications on file at office of Engr. of Water Dept.

Water Works.—City of Vinita, Okla., Guy Patton, Mayor.—Bids until May 25 to furnish all material, labor and construct improvements to water works system as follows: Combined intake and pumping station containing 3 motor driven centrifugal pumps, located on Grand River; 12-in. cast iron force line of Class A, B & C pipe, approximately 4.6 mto filter plant on Ketchum Hill, settling basin 60x82 feet, mixing chamber, head house, filter house, 2 filter units each 500,000 gal capacity, steel wash water tank, capacity 40,000 gal. elevated 30 ft., concrete circular reservoir, capacity 1,000,000 gals., 12-in. cast iron flow house of Class A and B pipe, approximately 7.5 mi. long to tower and tank in city; 13,200 volt transmission line, aluminum wire on wood poles, about 16 mi. long, also telephone line from city filter plant and River Station; plans on file at office of F. S. E. Amos, City Clerk, and with Burns & McDonnell Engineering Co., Kansas City, Mo.

Water Works.—City of Mebane, N. C., W. S. Crawford, Mayor.—Bids opened May 30 to construct water works improvements as follows: reinforced concrete filter plant, daily capacity 500,000 gal.; clear water basin, auxiliary pumping station, two 400 gal. per minute motor driven centrifugal pumps, laying 6000 ft. of 8-in. cast iron B & S pipe; plans and specifications on file at office of A. Alice Fowler, Town Clerk; Wm. M. Piatt, Engr., Durham, N. C.

Well Construction.—F. A. Hathaway, Supt., Public Instruction, Room 203 Court House,

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Jacksonville, Fla.—Bids until May 20 for sinking of 4½-in. flowing well, flow of 350 gals. per minute at surface.

Wharves and Jetties.—City of Norfolk, Va., Charles R. Ashburner, Mgr.—Bids until May 24 to construct wharves and jetties in connection with municipal terminal project, work includes 1400 ft. marginal wharf, 34 ft. wide of reinforced concrete or combination of concrete and creosoted lumber; 350 ft. marginal wharf, 18 ft. wide of creosoted timber and about 1500 ft. of jetty of creosoted piles; also reinforced concrete apron wharf around piers, approx. 2700 ft.; plans obtainable from Folwell-Asliskog Co., Contrg. Engr., 600 Seaboard Bank Bldg.

Woodworking Machinery.—John Baugh, 715 Joplin St., Joplin, Mo.—To purchase combination planer, and band saw.

Wreck Removal.—U. S. Engr. Office, Norfolk, Va.—Bids until May 16 for removing wreck of sailing ship Maria Borges, sunk in Hampton Roads, Va.; information on application.

Yarns (Knitting, Machine).—A. M. Young, 1036-3rd. St., San Diego, Cal.—Prices per lb. on machine knitting yarns in skanes, colored, samples of coarse, medium and fine.

Financial News

New Financial Corporations.

Ala., Albany—Decatur National Farm Assn., organized with P. R. Hutson, Secy.

Ala., Birmingham—Smith Cullom Real Estate & Insurance Co., 2122 First Ave., consolidated with E. R. McDavid, Jr., Co.; Norvell W. Collum, Pres.; E. R. McDavid, Jr., V-P.

Ala., Birmingham—Ensley Mortgage and Loan Co., \$50,000 capital, inceptd. by J. E. Lindsey, A. R. Long and W. H. Woolverton.

Ala., Birmingham—Mercantile Finance Corp., \$51,000 capital, inceptd. with E. B. Irwin, Pres.; J. B. Camill, V-P.

D. C., Washington—Hamilton National Bank, capital \$200,000, conversion of Hamilton Savings Bank, 7th and Eye Sts., N. W.

Fla., West Palm Beach—Florida Insurance & Investment Co., inceptd. by J. L. Griffin, Pres.; S. C. Kearley, V-P.

Fla., West Palm Beach—Citizens Investment Co., of West Palm Beach, capital \$100,000, inceptd. with B. A. Maxfield, Pres.; C. J. Ohmer, V-P. and E. C. Rumsey, Secy.-Treas.

Md., Baltimore—Hillsdale Permanent Building & Loan Assn., Inc., 344 Equitable Bldg., capital \$100,000, inceptd. by Simon E. Altschull, Sidney D. Cohen and Emanuel Gorfine.

Mo., Hale—State Bank of Hale, capital \$25,000, inceptd. by H. D. Snider, Pres.; L. L. O'Dell, V-P. (Lately noted.)

Mo., Kansas City—Rockhill Investment Co., capital \$30,000, inceptd. by F. F. Davis, Wm. R. Jewell, Jr., and C. K. Davis.

N. C., La Grange—First National Bank of La Grange, capital \$25,000, conversion of La Grange Bank & Trust Co.; W. H. Burke, Correspondent.

Okla., Beggs—American National Bank of Beggs, capital \$50,000, conversion of American State Bank of Beggs; E. G. Kelly, Correspondent.

Okla., Bokchito—First National Bank,

capital \$25,000, succeeds Bokchito State Bank; W. S. Works, Correspondent.

Okla., Newkirk—Security National Bank of Newkirk, capital \$30,000, conversion of Security State Bank of Newkirk; P. S. Mason, Pres.

Okla., Pawhuska—National Bank of Commerce of Pawhuska, capital \$50,000, conversion of Bank of Commerce; Ed. T. Kennedy, Correspondent.

S. C., Blacksburg—Blacksburg Building & Loan Assn., capital \$50,000, chartered with Chas. Barber, Pres., T. S. Ward and C. M. Whisonant, Vice-Pres.

Tenn., Chattanooga—Chattanooga Finance Corp., capital \$250,000 inceptd. by J. H. Wilson, S. A. Straus and others.

Tex., Dallas—Trinity Building & Loan Assn., capital \$1,000,000, inceptd. by D. M. Craddock, G. H. Irosh and others.

Tex., Mexia—Prendergast-Smith National Bank, capital \$100,000, conversion of Prendergast, Smith & Co.; Jack Womack, Pres.

Tex., Paris—North Star Building & Loan Association, capital \$1,000,000, inceptd. with Dr. W. W. Fitzpatrick, Pres.; Wm. Davenport, V-P. (Lately noted.)

Tex., Terrell—Terrell Building & Loan Association, capital \$100,000, inceptd. with C. J. Newton, Pres.; L. Rash, V-P.

Va., Leesburg—Leesburg Upperville National Bank, capital \$25,000, conversion of Leesburg Upperville Bank; E. B. White, Correspondent.

Va., Norfolk—Continental National Bank consolidated with Seaboard National Bank; \$800,000 capital.

Va., Roanoke—Farmers & Merchants Credit Corp., \$500,000 capital, organized with Holman Willis, Pres.; A. B. Coleman, V-P.

New Securities.

Ala., Birmingham—Park Improvements—City will vote May 22 on \$750,000 bonds; William L. Harrison, Commr. of Parks and Playgrounds.

Ala., Valley Head—School—Town votes May 25 on \$6000 bonds. Address The Mayor.

Ark., Dumas—School—Dumas School Dist., P. J. Smith, Secy., sold \$30,000 6% bonds to W. A. Hudson at 95.50; \$500 denomination. (Lately noted.)

Ark., Hope—School—Board of Education sold \$25,000 bonds to M. W. Elkins & Co., Little Rock, at par and accrued interest; S. R. Oglesby, Secy. for Dist.

Fla., Auburndale—Water—W. L. Mason, Clk. Board of Bond Trustees, will receive bids until May 12 for \$30,000 6% bonds; \$1000 denomination; dated Apr. 1, 1922.

Fla., Bushnell—Paving—City, C. B. Allen, Clk., receive bids until May 22 for \$10,000 6% semi-annual bonds; \$1000 denomination.

Fla., Dade City—Road and Bridge—Highlands Special Road and Bridge Dist. of Pasco County, A. J. Burnside, Clk. of Board of County Commrs., will receive bids until June 5 for \$750,000 5% serial bonds.

Fla., Eustis—Streets and Sewers—City voted \$90,000 streets and \$20,000 sewer bonds. Address The Mayor. (Lately noted.)

Fla., Fort Pierce—Road—St. Lucie County Commrs., P. C. Eldred, Clk., will receive bids until June 7 for \$50,000 6% time warrants; \$1000 denomination.

Fla., Green Cove Springs—Improvement—City sold \$150,000 bonds to Bank of Green Cove Springs and Atlantic National Bank

of Jacksonville at accrued interest and \$780 premium. Address The Mayor. (Lately noted.)

Fla., Plant City—Improvement—City, W. H. Durranee, Clerk, will vote May 23 on \$150,000 bond issue.

Fla., Miami—School—Dade County Special Tax Dist. No. 2 sold \$200,000 6% bonds to Geo. B. Gibbons & Co., New York, at \$24,540 premium.

Fla., Seabreeze—Water Works and Incinerator—City, D. F. Gold, Mayor, sold \$60,000 6% bonds to Atlantic Bank & Trust Co., Daytona, at par.

Fla., Starke—Roads—Bradford County, C. A. Futch, Secy., sold \$550,000 6% bonds to Blanchet, Thornburgh & Vandersall, Toledo, O., at \$54,000; \$1000 denomination; dated Jan. 1, 1922; mature serially 1928 to 1932. (Lately noted.)

Fla., Tampa—Road—Hillsborough County Commrs., will vote June 20 on \$3,000,000 bonds.

Fla., Winter Haven—Street, Sewers, City Hall and Electric—City voted \$275,000 bond issue. Address The Mayor.

Ga., Atlanta—Funding—Atlanta Gas Light Co., G. W. Brine, Pres., will issue \$393,000 funding mortgage bonds.

Ga., Cairo—School—Cairo School Dist. sold \$60,000 6% bonds to Trust Co. of Georgia, Atlanta, at par and \$3625 premium. (Lately noted.)

Ga., Dalton—School—City sold \$65,000 5½% bonds to J. H. Hilsman & Co., Atlanta, at 106.92 and accrued interest. Address The Mayor.

Ga., Forsyth—Paving—City voted street paving and sidewalk bonds. Address The Mayor.

Ga., Savannah—Road and Bridge—Chatham County Commrs., voted \$500,000 bonds, including \$250,000 road and \$250,000 bridge. (Lately noted.)

Ga., West Point—Water, Light and Sewer—City, J. A. Avery, Mayor, will vote May 24 on \$25,000 6% bonds.

Ky., Fulton—School—City sold \$50,000 bonds to Caldwell & Co., Nashville, Tenn., at \$2975 premium. Address The Mayor.

Ky., Jeffersonville—Refunding—Finance Comm. of City Council sold \$73,500 5% bonds to R. M. Grant & Co., Chicago, at par, accrued interest and \$900 premium.

La., Abbeville—School—Broussard School Dist. No. 1, J. H. Williams, Secy.-Treas., Parish School Board, will receive bids until May 29 for \$6000 6% bonds; dated May 15, 1922.

La., Amite—Road—Tangipahoa Parish Police Jury, F. C. West, Secy., will receive bids until May 23 for \$87,000 5% bonds of Road Dist. No. 6; \$500 denomination.

La., Baton Rouge—Road—East Baton Rouge Parish Police Jury, 4th Ward, voted \$40,000 bonds.

La., Cedar Grove—School—Caddo Parish School Dist. No. 19, will vote May 16 on \$150,000 bonds. Address School Board.

La., Covington—Water and Sewer—City will vote May 25 on \$130,000 bond issue. Address The Mayor.

La., Houma—Electric, Water and Filtration Plant—City, H. M. Bourg, Mayor and Board of Aldermen will receive bids until June 6 at office of Dreux Angers, City Clk., for \$200,000 bonds. (Lately noted.)

La., Lake Charles—Drainage—Sulphur Drainage Dist. No. 3, Edw. J. Rustilon, Secy.-Treas., sold \$10,000 5% bonds to Lake Arthur Dredging Co., Beaumont, Tex.; \$250 denomination; dated Feb. 1, 1922; mature annually 1923 to 1939. (Lately noted.)

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

La., Lake Charles—School—Calcasieu Parish will vote May 18 on \$70,000 bonds. Address School Board.

Md., Annapolis—Road and Bridge—State, John M. Dennis, Treasurer, will receive bids until June 13 for \$1,500,000 4½% lateral post road and bridge loan of 1922; \$1000 denomination.

Md., Towson—Sewerage—Baltimore County, John R. Haut, Clk., will receive bids until May 24 for \$150,000 4½% semi-annual 17½-year certificates.

Md., Salisbury—School—Wicomico County will vote May 23 on \$300,000 bond issue. Address County Commrs.

Miss., Batesville—School—City will vote May 30 on \$35,000 bond issue. Address The Mayor.

Miss., Durant—Water, Sewer and School—City voted \$80,000 6% bonds; \$100 and \$500 denomination; dated June 15, 1922; over 25 years maturity; will open bids for purchase June 1. (Lately noted.)

Miss., Durant—Water, Sewer and School—Town, D. V. Pound, Mayor, will receive bids until June 1 for \$80,000 6% 25-year bonds. (Lately noted.)

Miss., Durant—Water, Sewer and School Improvements—City voted \$80,000 bond issue. Address The Mayor.

Miss., Fayette—Road—Third Supvr.'s Dist., Jefferson County, voted \$50,000 bond issue. Address County Commrs.

Miss., Laurel—School—Shady Grove Consolidated School Dist. votes May 21 on \$8000 bond issue. Address School Board.

Miss., Laurel—State Colony for Feeble-minded—Jones County Commrs., receive bids until June 5 for \$55,000 bond issue.

Miss., Summit—Street, Water and School—City will vote May 15 on \$8000 sidewalk, \$8000 water and \$14,000 school bonds. Address The Mayor.

Mo., Aurora—Sewer—City sold \$40,000 5% bonds to Mississippi Valley Trust Co. for \$340 above par. Address The Mayor.

Mo., Fulton—Road—City will vote May 18 on \$50,000 bonds. Address The Mayor.

Mo., Glasgow—Bridge—County will vote May 26 on \$105,000 bonds. Address County Commrs.

Mo., St. Joseph—Road—Buchanan County, A. E. Nash, Treas., sold \$600,000 5% bonds to Empire Trust Co., St. Joseph, and Harris Trust & Savings Bank, Chicago, jointly at par and \$300,102 premium. (Lately noted.)

Mo., St. Joseph—Fire, Judgments and Cost, and Indebtedness—City, D. S. Willard, Comptroller, will receive bids until June 1 for \$240,000 fire, \$45,000 judgments and costs and \$30,000 street bonds; 5% 12½-year average.

Mo., St. Louis—Gatesworth Investment Co., Inc., capital \$200,000, inctpd. by A. D. Gates, E. M. Worthington and G. G. Boland.

Mo., Webb City—School—School Board, Claude E. Ball, Secy., sold \$15,000 5% bonds to Mercantile Trust Co. (Lately noted.)

N. C., Bessemer—Street, Water and City Hall—City sold \$120,000 bond issue to Splitzer, Roldig & Co., Cleveland. (Lately noted.)

N. C., Burlington—Improvement and Funding—City, M. W. McPherson, Treas., will receive bids until May 22 for \$80,000 public improvement and \$20,000 funding bonds; 5½% interest; \$1000 denomination.

N. C., Charlotte—Improvement—City will vote on \$280,000 bond issue. Address The Mayor.

N. C., Charlotte—Road—Mecklenburg County Commrs., R. E. Young, Clk., will receive bids until May 15 for \$1,400,000 6% bonds.

N. C., Cornelius—Electric—Town, T. P. Howard, Clk., sold \$10,000 6% bonds to Farson, Son & Co., New York, at 101.31; \$500 denomination. (Lately noted.)

N. C., Denton—School—City will vote June 6 on \$20,000 bonds. Address The Mayor.

N. C., Fairmont—School—City voted \$75,000 bond issue. Address The Mayor.

N. C., Hamlet—Street, Sewer and Funding—City Council sold \$115,000 5½% bonds to American Trust Co., Charlotte at \$69 premium.

N. C., Hamlet—Street, Sewer and Funding—City sold \$115,000 5½% bonds to American Trust Co., Charlotte, at \$69 premium. Address The Mayor.

N. C., Hickory—School—Town Board, R. H. Shuford, Atty., sold \$60,000 bonds at par and accrued interest.

N. C., Lumberton—Road—Robeson County, Britts Township, will vote on \$20,000 bonds. Address County Commrs.

N. C., Maiden—Waterworks and Funding—Town, S. M. Finger, Clk., will receive bids until May 19 for \$15,000 6% bonds; \$1000 denomination.

N. C., Newell—School—Board of Education sold \$25,000 bonds to John T. George, Cherryville.

N. C., Raleigh—School—State, B. R. Laey, Treas., sold \$1,000,000 of \$5,000,000 bond issue to Fidelity Bank of Durham.

N. C., Raleigh—School—School Comm., T. B. Eldridge, Chrmn., will receive bids until May 22 for \$350,000 4½, 4% and 5% semi-annual 16¾-year bonds.

N. C., Taylorsville—School—Alexander County School Dist., C. H. Gryder, Supt., will receive bids until May 15 for \$50,000 6% bonds; dated May 15, 1922.

N. C., Winston-Salem—Road—Forsyth County Commrs., J. M. Lentz, Clk., will receive bids until May 15 for \$800,000 5% bonds; \$1000 denomination; dated May 1, 1922.

Okla., Adamson—School—Adamson School Dist. voted \$25,000 bonds. Address School Board.

Okla., Burbank—Water, Sewer and Light. City voted \$88,000 6% 25-yr. bonds; George Sheel, Chrmn. Comm. (Lately noted.)

Okla., Chandler—Road—Lincoln County Commrs. are considering calling election on \$75,000 bond issue.

Okla., Clinton—Water—City voted \$50,000 bonds. Address The Mayor.

Okla., Fairland—Water and Light—City voted \$43,500 bond issue. Address The Mayor.

Okla., Grove—Piersol Bond Co., Oklahoma City purchased \$20,000 Township No. 1 and \$30,000 Township No. 2 bonds at par and accrued interest; 6%; \$1000 denomination.

Okla., Oklahoma City—School—School Commrs., A. S. J. Shaw, Secy., sold \$641,000 bonds to Brown-Crummer Investment Co., Wichita, at par and accrued interest.

Okla., Tulsa—Road—City, E. E. Short, Treas., sold \$40,000 bonds to Hanchett Bond Co., Chicago, Ill., at par, accrued interest and \$207.50 premium.

Okla., Venita—Paving—City sold \$73,400 bonds to W. C. Illick, Muskogee, at par and accrued interest.

S. C., Anderson—School—Anderson School Dist. No. 17, E. C. McCants, Supt., sold \$225,000 5% 5-year bonds at \$3150 premium. (Lately noted.)

S. C., Charleston—School—City voted \$750,000 bond issue. Address The Mayor. (Lately noted.)

S. C., Darlington—Road—Darlington County sold \$100,000 5% bonds to W. M. Davis & Co., Macon, Ga., at par, accrued interest and \$1280 premium.

S. C., Easley—Street, Water and Light—City will vote on \$75,000 bond issue. Address The Mayor.

S. C., Greenville—Water and Sewer—City, G. G. Wells, Clk., votes June 6 on \$400,000 bond issue.

S. C., Greenville—Road—Greenville County, H. P. Dill, Supvr., will receive bids until May 29 for \$75,000 6% 20-year bonds; \$1000 denomination.

S. C., Lancaster—School—Lancaster School Dist. sold \$160,000 5% bonds to D. C. Haywood & Co., Columbia, at par and accrued interest.

S. C., McCormick—Town Council and Board of McCormick County Commrs., receive bids until May 31 for \$30,000 town and \$40,000 county bonds; 6%; dated June 15, 1922.

S. C., Timmons—Water and Sewer—City will vote May 23 on \$15,000 bonds. Address The Mayor.

Tenn., Erwin—School—Unicoi County Court, M. F. Parsley, Chrmn., will receive bids until May 12 for \$25,000 6% bonds.

Tenn., Humboldt—Street—City voted \$20,000 bonds. Address The Mayor.

Tenn., Johnson City—School—City, T. H. McNeil, Recorder, will receive bids until May 17 for \$125,000 5½% semi-annual 30-year bonds.

Tenn., Lebanon—Water and Sewer—City sold \$200,000 5% bonds to J. W. Jakes & Co., Nashville, at par and accrued interest.

Tenn., Nashville—Sewer and Reservoir—City, S. H. McKay, Clk., will receive bids until May 23 for \$500,000 sewer and \$248,000 reservoir bonds; 5%.

Tex., Breckenridge—School—City sold \$100,000 bonds to Stearns & Co., Kansas City. Address The Mayor.

Tex., Breckenridge—Street—City sold \$330,000 6% bonds to Morey & Co., New York; \$1000 denomination. Address The Mayor.

Tex., Brenham—Road—Washington Commrs. Court will sell \$300,000 bonds. Address County Commrs.

Tex., Clarendon—Water—City sold \$75,000 6% bonds to Dunn & Carr, Houston, at par and \$3655 premium. (Lately noted.)

Tex., Coleman—Road—Coleman County, L. G. Matthews, Judge., will receive bids until May 23 for \$387,000 5½% bonds.

Tex., Electra—Water and Sewer—Attorney General, Austin, approved \$80,000 water and \$20,000 sewer bonds. Address The Mayor.

Tex., Ennis—Street, Sewer, Buildings, Funding, etc.—City Comsn. called election for June 20 on \$260,000 bonds.

Tex., Johnson City—Road—Blanco County voted \$25,000 bond issue. Address County Commissioners.

Tex., Kerens—School—City voted \$35,000 bond issue. Address The Mayor.

Tex., Lamesda—Water and Sewer—City voted \$65,000 water and \$35,000 sewer bonds. Address The Mayor.

Tex., Lubbock—School—City sold \$150,000 5½% bonds to Sutherlin-Barry Co., New Orleans, La., at par, accrued interest and \$2250 premium; \$1000 denomination; dated Apr. 15, 1922; mature \$3000 annually from 1927 to 1941 and \$5000 from 1942 to 1962. (Lately noted.)

Tex., Marlin—Road—Falls County Precinct Road Dist. No. 5, E. M. Dodson, County Judge, will vote May 20 on \$30,000 5½% bonds.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Tex., San Angelo—School—City, R. H. Henderson, Mgr., plans to call election on \$10,000 bond issue.

Tex., West—School—City voted \$55,000 bonds. Address The Mayor.

Va., Blackstone—School—Belfont School Dist., sold \$60,000 6% bonds to John Nuveen & Co., Chicago, at par and \$4075 premium; \$1000 denomination.

Va., Petersburg—Improvements—City will issue \$1,000,000 bonds. Address The Mayor. (Lately noted in part.)

Va., Princess Anne—Drainage—Board of Drainage Commrs. of Pungo Drainage Dist. No. 1 of Princess Anne County, W. T. Braithwaite, Chrmn., will receive bids until May 15 at Virginia National Bank, Norfolk, for \$17,000 6% bonds; \$500 denomination.

W. Va., Charleston—Road—Kanawha County will vote June 3 on \$90,000 bonds. Address The Mayor.

W. Va., Morgantown—Sewer and Municipal Building—City will vote June 1 on \$700,000 5% bonds. Address The Mayor. (Lately noted.)

W. Va., Morgantown—Road—Mongalia County Court will call election on \$325,000 bonds for Battelle Dist. Address County Commissioners.

W. Va., Welch—Road—McDowell County Court, Big Creek Dist., voted \$450,000 bonds.

Financial Notes.

Liberty Savings and Loan Co., Inc., Julian T. Winfree, Pres., Richmond, Va., increased capital from \$100,000 to \$200,000.

Local Building & Loan Assn., Oklahoma City, Okla., increased capital from \$37,000,000 to \$42,000,000.

Morris Building & Loan Assn., Morris, Okla., increased capital from \$350,000 to \$400,000.

W. Va., Bluefield—Bluefield Trust Co., increased capital from \$100,000 to \$200,000.

Trade Literature.

Sand and Gravel Machinery.

Sand and gravel equipment manufactured by the American Road Machinery Company, Incorporated, Kennett Square, Pennsylvania, is the subject of Catalog No. 5A issued by that corporation, the general sales agents being the Good Roads Machinery Company, Incorporated, of the same place. This covers machinery for excavating, elevating, conveying, crushing, screening and washing. The book is completely illustrated and contains much valuable information in addition to the descriptions of the different pieces of machinery.

Concrete Floors Insured By Bond.

The General Chemical Company, 25 Broad Street, New York, have issued a valuable and interesting folder describing completely the "Hard-n-tyte" specifications for concrete floor finish, which is described as "a practical and complete specification for the proportions, consistency, and application of concrete floor finish, coupled with an application of 'Hard-n-tyte' assuring a permanent wearing surface free from dusting." Covering floors laid under these specifications and with this application the company issue a five year guaranty bond of the United States Fidelity & Guaranty Company.

About Boiler Tubes.

National Bulletin No. 16D published by the National Tube Company, Pittsburgh, Pa., relates to the manufacture and advantages of "National" and "Shelby" boiler tubes. There are sixteen pages to the bulletin which gives complete information with pictures and tables.

Fine Linings, Drain Tile, Sewer Pipe, Etc.

Several fine folders of pocket size have been issued by the Oconee Brick & Tile Company, manufacturers of clay products, Milledgeville, Georgia. They describe and illustrate chimney flue linings, farm drain tiles, sewer and culvert pipes, with full particulars as to dimensions, prices, etc. Interesting data concerning the drainage capacity of farm tile in acres will be found very valuable by agriculturists in making estimates.

Worm Drives for Industrial Locomotives.

Bulletin 2210 of the Geo. D. Whitcomb Company, Rochelle, Ill., describes and illustrates the worm drive for storage battery locomotives for industrial uses. The pictures are remarkably fine and the reading matter is full and complete. Detailed data is given so that everyone interested may be well acquainted with the machinery and consequently obtain therefrom all of its manifold advantages.

Ditch Digging With Dynamite.

Several years ago drainage ditching done by the use of explosives was a new thing but it is now well established in practice and as a result of this wide use of them the Du Pont Company, Wilmington, Del., have received many requests to publish something giving in compact form the necessary data on the subject. They now issue a booklet, "Ditching With Dynamite," which is exceedingly complete and presents all needed information. It is a compendium of knowl-

edge derived of experience in different parts of the United States from north to south and east to west. Moreover, it is more of a text book than an advertisement and will be exceedingly valuable to anyone interested.

A Valuable Catalog.

Mesker Brothers Iron Co., Sixth, Poplar and Seventh Sts., St. Louis, Mo., have mailed to the trade a catalog and price list of steel sash and window walls which also gives prices and weights of double strength and one eighth ribbed glass, thus enabling owners, architects and contractors to estimate the cost of their requirements. These steel sash and window walls have been installed in many large buildings throughout the country.

A New Ditching Machine.

The Pittman & Arnold patented hillside and tile ditcher is the subject of a finely prepared bulletin issued by the Athens Foundry & Machine Works, of Athens, Ga., who manufacture it. On the front page is a picture showing a ditch 33 inches deep, 20 inches wide and 300 feet long which was dug, it is stated, in two hours by one of these ditchers drawn by a team of ordinary work size mules. Full particulars concerning the machine are given with illustrations.

Pneumatic Tools.

A large illustrated folder with excellent pictures has been issued by the Independent Pneumatic Tool Company, 600 West Jackson Boulevard, Chicago. Tools made at this plant bear the name "Thor" and attention is called to the economy which can be accomplished by their use. They include piston air drills, pneumatic hammers, electric drills, etc. Other products mentioned are stay-bolt drivers, rammers, holders-on, reamers and grinders, motor hoists, moisture air separators, pneumatic tool hose, hose couplings, etc.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

New York Branch In New Building.

The Dodge Sales & Engineering Co., of Mishawaka, Ind., manufacturers of power transmission appliances and heavy oil engines, have removed their New York City branch from 21 Murray St. to the new twelve story Dodge building, 35 Park Place, at the corner of Park Place, West Broadway and Murray Sts., where they will carry emergency trade service stocks and also display their products.

New Engineering Firm.

Hadlow, Hick & Co., engineers, is a new firm organized with offices in the Finance Building, Cleveland, O., by H. Ralph Hadlow and Noel H. Hick, who have withdrawn from the Watson Engineering Co., of which Mr. Hadlow was former vice-president and general manager and Mr. Hick was former director and engineer in charge of building design. In the new firm they will continue the practice of their profession in the design, supervision and construction of commercial and industrial buildings and power plants.

Several Important Contracts.

Kaucher, Hodges & Co., Exchange Building, Memphis, Tenn., are building the municipal swimming pool there. This is a one story building 276 by 83 feet and constructed of concrete, brick and steel. Capacity 2000 people. The pool is owned by the city and is operated by the Park Commissioners. Among other contracts being executed by this firm are a 25,000 bushel grain elevator

for the Edwin C. Hawkins Grain Co., a 12,000 bushel elevator for the Yopp Seed Co., and a four story warehouse, 150 by 50 feet, of reinforced concrete construction, to cost \$125,000 for the Crane Company, of Chicago.

A Valuable Book Reference List.

Scovell, Wellington & Company, Accountants and Engineers, 110 State St., Boston, Mass., but with offices also in Springfield, Mass.; New York City, N. Y.; Cleveland, O.; and Chicago, Ill., have prepared a printed list of "Selected Professional and Business Books" which it is believed will prove very helpful to anyone interested in building up a business library. The list was compiled for the staff of this firm and it comprises 400 books on accountancy, industrial engineering and kindred business subjects.

Business Expanded Into Manufacturing Lines

The High Point Machine Works, Inc., primarily a repair shop, have been branching out lately and are manufacturing a line of glass beveling and polishing machinery for use in factories producing plain and beveled mirrors and window glass. These machines have been shipped to various parts of this country and Canada; last month a shipment was made to California. They have also recently brought out a new clamp for furniture factories to clamp up at one operation the bow foos for beds and they are, furthermore, making a specialty in their foundry work of textile and municipal castings. In

addition to these activities the company are also in a position to take up special machines of various kinds and already do considerable work along this line. Business has shown a gradual improvement since March 1, especially in the foundry, and it is indicated that this condition will continue. It is hoped to have the factory running at full capacity by autumn if not earlier.

Enlargement of Manufacturing Plant.

The Bucyrus Company, manufacturers of excavating machinery, etc., South Milwaukee, Wis., are making extensive enlargements to their plant in that city as well as to their other plant at Evansville, Ind. These changes and rearrangements now in progress will take care of their increasing volume of business and enable them to manufacture more economically. At South Milwaukee, where all the larger machinery is built, a new gray iron foundry 276 feet long is being erected, while the old gray iron foundry, now the south end of the steel foundry, is being changed into a cleaning room with annealing ovens, sand blast rooms and a welding room. There is also a large addition to the steel foundry moulding floor and an electric furnace is being installed. Extensive improvements are being made in the foundry storage yards. At Evansville, Ind., where the plant specializes in making small revolving shovels, the machine and erecting shops are being considerably enlarged.

Sprinkler Protection Installations.

The R. C. Beverley Heating Co., Inc., 9 North Seventh Street, Richmond, Va., have recently turned their attention more particularly to automatic sprinkler systems for fire protection than they have heretofore and are in a position to put into such work their usual quality and service such as distinguishes their engineering and contracting business in heating lines. The firm operates in this particular work throughout Virginia, North Carolina and South Carolina, besides also conducting these installations for steam, hot water, and vapor heating, plumbing and gas fitting, and complete power and central heating plants.

Plant Again On Sound Basis.

The sale of the Harvey Steel Products

Corporation under receivership proceedings having been confirmed by the Federal court their plant is now again under its old name, Southern Engine & Boiler Works, Jackson, Tenn. It is stated that the organization is now back on a sound operating basis, both financially and otherwise—better than ever before in its history, being free from encumbrance and with plenty of operating capital. It is expected to continue the manufacture of the same line of machinery, namely steam engines and boilers, saw mills, saw mill machinery, etc. The plant was purchased at the receiver's sale for \$100,000 by W. H. Collier, which sum, it is further stated, was paid in cash. Fletcher Goodwill, of New York, is associated with Mr. Collier in the deal. W. R. Teachout is general manager. The plant will be put in operation immediately.

Demand for a Southern-Made Motor Car.

J. C. Tegder has been appointed director of sales and advertising for the Hanson Motor Co., Atlanta, Ga., manufacturers of the "Hanson Six." He has been a motor car distributor for some years and in 1910 was sales manager of the Staver factory, Chicago. F. J. Kelley, New Orleans, will distribute the Hanson cars in Louisiana, and the Law Motor Co., Biloxi, Miss., has the southern Mississippi territory. A train load of these cars has just been shipped from the factory at Atlanta to the Florida distributor, Grady Deen, of Jacksonville and Tampa. There were 27 carloads, making the second train load received by him within ten months.

Important Data On Lighting.

Lighting data issued by the Edison Lamp Works of the General Electric Co., Harrison, N. J., includes several very interesting illustrated bulletins with titles as follows: "The Lighting of Public Buildings," "Church Lighting," "Residence Lighting," and "The Edison Mazda Lamp for Motion Picture Projection." The pictures in these publications are especially good and convey many valuable suggestions. They are printed on high quality paper and give full detail.

Sale of An Important Plant.

The real estate, machinery and lumber of the Basic Manufacturing Company, Basic City, Va., are to be sold on Monday, May

29 at 11 o'clock A. M. eastern standard time at a trustees' and receiver's sale, according to a formal announcement in another column giving particulars. Samuel T. Freeman & Co., 1519-21 Chestnut St., Philadelphia, Pa., are the auctioneers who will conduct the sale and who will give further particulars, catalogs, etc.

A New Branch Office Established.

The Raymond Bros. Impact Pulverizer Co., 1315-1325 North Branch St., Chicago, have just established their new permanent western office at 1002 Washington Building, Los Angeles, Cal., which will be under the charge of W. B. Senseman, who has had a great deal of experience in erecting, operating and furnishing Raymond equipment for grinding to a powder all kinds of materials.

Offering Southern Farm Lands.

H. H. Richardson, 408 St. James Building, Jacksonville, Fla., has established there a business for the sale of Southern agricultural lands for development and colonization, giving a specialized service for both owners and buyers. Mr. Richardson is well posted as to the possibilities of such property, having been for nine years actively connected with the Southern Settlement and Development organization.

Reorganization and Expansion.

The Stuebing Truck Co., Cincinnati, O., manufacturers of the Stuebing lift truck and systems, was reorganized recently, the new officers being W. C. Steubing, president; W. R. Stuebing, vice president; J. R. Harlan, secretary; M. S. Stuebing, treasurer. There is no change in capitalization. Plans are being made for a considerable expansion, the company having in view a new and improved lift truck, besides bringing out a steel bound platform to take the place of makeshift devices frequently employed heretofore by users to hold the loads carried. These platforms are of different patterns to meet requirements of purchasers and one of them is made in sections so that the user can build a container to any height desired. While designed especially for the Stuebing trucks these platforms can be used with any truck.

The South Must Keep on Telling "The Other Fellow" by Ceaseless Publicity Work.

J. G. ANDERSON, Pres., Anderson Motor Company, Rock Hill, S. C.

You are doing a great work for the South, and I enjoy reading your articles in the RECORD. We have the greatest country in the world, especially this Piedmont section, where it is never very hot and never very cold, and sooner or later, the North and the West will realize that this is in reality the "garden spot of the world," and in twenty-five or fifty years it will be thickly populated.

At the present, land values are very low because there is more land than there are people to work it, but this will not always be so. Any man who buys a farm in the South to-day and tills it properly will in from fifteen to twenty-five years be a rich man, as farm values will probably increase from 500 per cent to 1000 per cent.

It is all "stuff" about the Southern people being slow. I have traveled all over the country, and have customers located in practically every big city in the United States, and I run across just as many "numb-skulls" in the North as I do in the South, and perhaps more, and so far as being "slow" is concerned, our labor is as "fast" as any of them.

There is a wide-spread belief, however, in the North that

the South, generally speaking, is slow and non-progressive, and that no good thing can come out of it. I have heard people make substantially this statement, and they were thoroughly honest and sincere. We have some trouble in marketing our product in the North simply for the reason that we are located in the South. Some automobile dealers have even written us that they want us to leave off the name-plate on the radiator that carries our address, as they say their customers, or at least some of them, immediately conclude that if a car is made in South Carolina, that it is inferior, and, therefore, most of them never let a prospect know that the car is made in the South if they can avoid it.

The South should do something to break down this prejudice. Of course, it will be gradually broken down in time, but it will require many years to simply wear itself out, whereas if some method were adopted by way of advertising, or otherwise, this country could, and would, come into its own very much sooner.

All of us down here appreciate what you are doing for the South. It is well nigh incalculable. You know, and we know, that we have the greatest country in the United States, but we should let the "other fellow" know it, and must let him know it before our country will ever develop in its highest degree.

DUPONT

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ACID

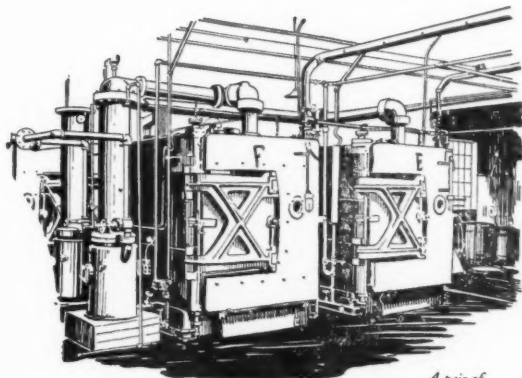
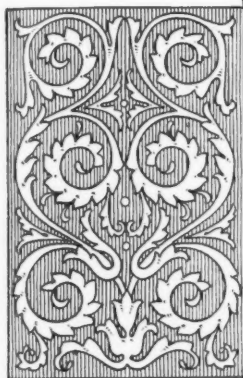
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BASIC

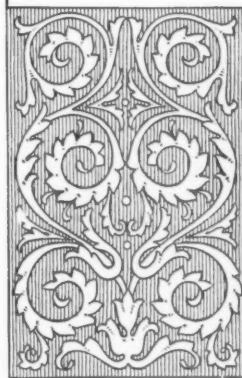
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DYESTUFFS



*A pair of
Vacuum Dryers*



Only a few degrees between success and failure

A dyestuff may be correctly produced and precipitated, but it can be considerably dulled in shade or entirely decomposed during its drying by a sudden rise in temperature of a few degrees.

Certain dyes, because of their sensitiveness to any considerable amount of heat have to be dried under high vacuum at greatly reduced temperatures.

It is Du Pont practice, after correct production, to effect the drying of a dyestuff under accurately controlled conditions so that its desirable qualities are in no way altered, resulting in a *uniform* finished product.

E. I. du Pont de Nemours & Co., Inc.

Dyestuffs Department

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DELAWARE

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Providence

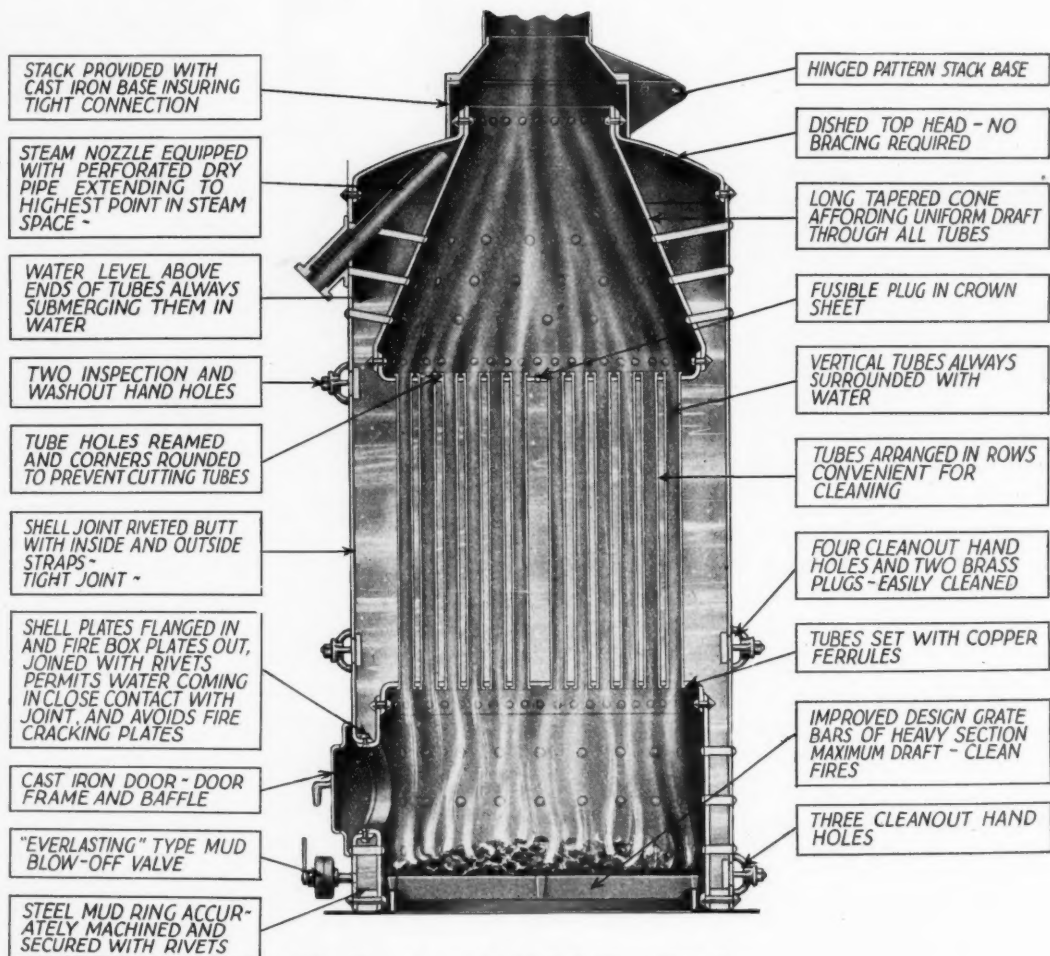
Philadelphia

Chicago

Charlotte, N. Car.



REASONS why Boilers on OSGOOD Revolving Type Shovels are BEST



Built to A.S.M.E. Code

The OSGOOD Company

Marion, Ohio, U. S. A.

Builders of High Grade Excavating Machinery

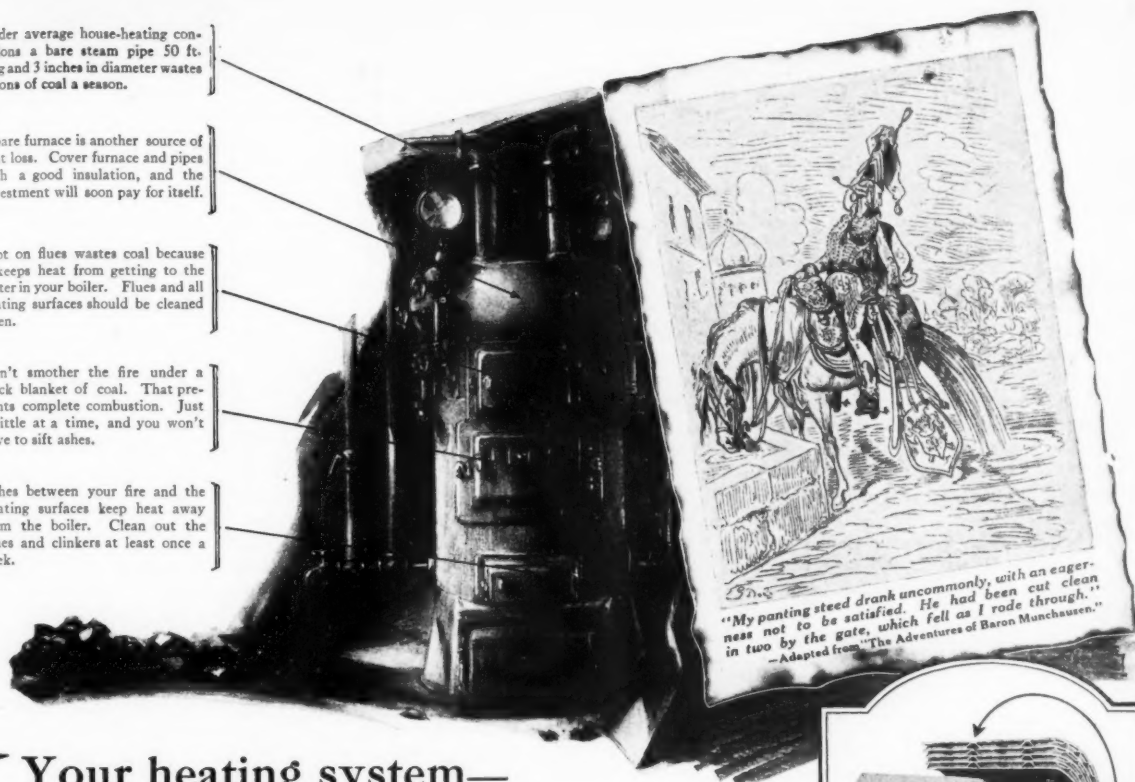
Under average house-heating conditions a bare steam pipe 50 ft. long and 3 inches in diameter wastes 4 tons of coal a season.

A bare furnace is another source of heat loss. Cover furnace and pipes with a good insulation, and the investment will soon pay for itself.

Soot on flues wastes coal because it keeps heat from getting to the water in your boiler. Flues and all heating surfaces should be cleaned often.

Don't smother the fire under a thick blanket of coal. That prevents complete combustion. Just a little at a time, and you won't have to sift ashes.

Ashes between your fire and the heating surfaces keep heat away from the boiler. Clean out the ashes and clinkers at least once a week.



Your heating system— just like Munchausen's horse

MANY a furnace is as greedy for coal as the redoubtable Baron's horse was for water—and with as good reason. The chart above shows five ways that coal is commonly wasted.

It pays to check these losses—sometimes saving as much as one-fourth of the season's fuel bill.

A mysterious loss—checked

Less easy to trace than coal losses from faulty drafts and wasteful firing is the loss from uncovered furnace and pipes. The pipes, running through icy walls, give up much of their heat somewhere in between a warm cellar and a chilly upper floor.

If your house is still in the plan stage, you can prevent most of this loss by covering the pipes. If you are now living in the house, it is a simple

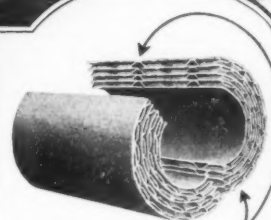
matter to cover the cellar pipes and thus make a considerable saving. In either case, cover the furnace too.

Four reasons for Asbestocel

But this is important—not any covering will do. The insulation which checks up on every requirement a good insulation should meet, is Johns-Manville Improved Asbestocel.

It is durable. It is economical. It is neat in appearance. Its remarkable efficiency is accounted for by an improvement in construction—the closed cellular construction which prevents circulation of air through the covering.

Just what this feature, together with economies in manufacture, means to you is that by actual test Improved Asbestocel saves more heat per dollar of cost than any other household insulation on the market.



Insist on this construction

Note that the corrugations run both lengthwise and crosswise—instead of lengthwise alone, as in other coverings. Insist on closed cell construction as your insurance for maximum heat saving. Ask for

Johns-Manville Improved Asbestocel

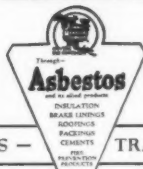
To the Trade: Johns-Manville has just issued a booklet which tells how to sell and apply heat insulations. Send for a copy and get ready for inquiries.

JOHNS-MANVILLE Inc.
Madison Ave. at 41st Street, N. Y. C.
Branches in 56 Large Cities
For Canada:
CANADIAN JOHNS-MANVILLE CO.,
Ltd., Toronto



Send for this book. It will help you get more out of your coal bin, whether or not you're ready for Johns-Manville Insulation.

JOHNS-MANVILLE Asbestos



PIPE COVERINGS — PACKINGS — CEMENTS — POWER SPECIALTIES —

TRAPS

Would Establish Fish Factory at Mosquito Inlet.

Geo. A. Ormerod, of the Independent Fisheries, Mayport, Fla., has prepared a prospectus of a small fish reduction plant and food fishery to be located at Mosquito Inlet, near New Smyrna, Fla. He points out the possibilities in the manufacture of fish oil and fertilizer, the making of leather from shark and porpoise skins, as well as supplementing this with the catching of food fish during the off season for menhaden.

The prospectus states that the fishing grounds for menhaden are particularly ideal, being within easy access of the proposed factory location, and ranging in extent from below Cape Canaveral to Fernandina. It is claimed that all the fish necessary to supply the largest fish factory can be found in season within a radius of 50 miles. Immense quantities of fish frequent these waters practically all the year. Shark and porpoise also abound, making possible the building up of a leather making industry. Furthermore, it is stated the operation of boats in this locality would be economical because of the small area to be covered, and during such period of the year when menhaden are not running, the boats could turn their attention to catching food fish such as mullet, bluefish, snapper, Spanish mackerel, etc.

The menhaden fishing business is a long established industry and exists primarily to supply the needs of agri-

culture, animal husbandry, the steel, leather and paint industries, and technical trades.

There are about sixty plants scattered along the Atlantic seaboard and Gulf Coast. Thus far the industry in Florida has been confined almost entirely to the upper East Coast, although facts are said to have long shown that the Cape Canaveral coast is a virgin field, the waters literally teeming with menhaden.

Sawn Lumber Exports Register Big Increase.

According to figures compiled by the Department of Commerce the total exports of sawn lumber—boards, planks and scantlings from the United States for the month of March were 120 per cent greater than during the corresponding month last year. Though the demand for Douglas fir from the Far East is reported to have fallen off temporarily, shipments not only continue heavy but established a new high record in March. Foreign shipments of Southern yellow pine maintained in March about the 1921 average, exhibiting no noteworthy features. The only change in hardwoods is the continued increase of gum exports, the month's shipments being nearly 4,000,000 feet as against 2,000,000 in March of last year, and for the nine-month period 26,700,000 feet as compared with 17,682,000 in 1921.

R. C. Beverley Heating Co., Inc., Richmond, Va.

Engineers and Contractors

HEATING VENTILATING PLUMBING
AUTOMATIC SPRINKLER SYSTEMS
HIGH PRESSURE POWER PLANT PIPING

Quality

Service

TODD & McCOLLOUGH

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AMERICAN SOCIETY OF CERTIFIED PUBLIC ACCOUNTANTS

Auditing, Cost and Accounting Systems,
and Federal Tax Service.

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Charlotte, N. C.

RAILROAD SPIKES FOR BIRMINGHAM

Birmingham is one of the best steel rail manufacturing centers of the country and yet no railroad spikes are made here. Conditions are ideal for their manufacture; freight rates to Gulf and foreign points via the Warrior River are very attractive. Real estate inquiries of all kind solicited.

JEMISON & CO. BIRMINGHAM, ALA.

BLACK & COMPANY

(WILMER BLACK, C. P. A.)

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OUR experience of more than a half century of service to buyers of printing should be of some value to you in solving your printing problems. It will pay you to consult us when in need of such service.

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We specialize in calendars.

The First Edition of the BLUE BOOK OF SOUTHERN PROGRESS Nearly Exhausted

Many individuals and organizations have distributed copies of this book by the hundreds. It is crammed full of facts and figures of the South's resources and development that Business men could study with profit. Single copies 50c.

Manufacturers Record,

Baltimore, Md.

THE BANK OF ALABAMA

ENSLEY, ALABAMA

R. A. TERRELL	- - - - -	President
J. W. MINOR	- - - - -	Vice-President
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General Banking - Domestic and Foreign

Correspondence Invited

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CAPITAL, \$1,000,000

We Buy BondsCity, County, School and Road, from
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THE PROVIDENT SAVINGS BANK & TRUST CO.
CINCINNATI OHIO**WE BUY MUNICIPAL BONDS**We are interested in the purchase of
Southern Municipals including road,
school, county, drainage and levee bonds.**M. W. ELKINS & CO.**

Southern Trust Bldg. Little Rock, Ark.

NOTICE TO CONTRACTORSWe want to buy bonds issued by cities, towns,
counties, school, road or drainage districts that you
may be able to take in exchange for work. Address
us at our nearest office.**W. L. SLAYTON & CO.**New Orleans, La. Toledo, Ohio Tampa, Fla.
Chicago, Ill. Glasgow, Mont.**WE BUY
Municipal Bonds****THE ROSENSTIEL-ELLIS COMPANY**

FIRST NATIONAL BANK BUILDING CINCINNATI, O.

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Ingalls Bldg., Cincinnati, O.

BUY County
City
School **BONDS**

Write us if you have any for sale.

Investment Bankers

are offered

Power and Light Securitiesissued by companies with long records of substantial
earnings.We extend the facilities of our organization to those
desiring detailed information or reports on any of
the companies with which we are identified.**Electric Bond and Share Company**

(Paid-up Capital and Surplus, \$28,000,000)

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FINANCING****F. S. Smithers & Company**

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DELAWARE REGISTRATION TRUST CO.100 West Tenth Street
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Chas. Warner Smith, Vice-President.
Harry W. Davis, Secretary and Treasurer.**COLONIAL CHARTER CO.**

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FORMS AND INSTRUCTIONS UPON REQUEST**Contractors and Municipal Officials**We are always in the market
TO PURCHASEGood municipal bonds issued by cities, towns, counties
and school districts**BREED, ELLIOTT & HARRISON**

322 WALNUT ST.

CINCINNATI, OHIO

WE BUY MUNICIPAL BONDSWrite us if your community is con-
templating issuing bonds or has
bonds to sell.**THE W. H. SILVERMAN CO.**

309 Mercantile Library Bldg.,

Cincinnati, Ohio

The Value of the Agricultural Engineer to Farming Enterprise.

A careful study of many farming enterprises shows that a large number of failures, due chiefly to a lack of careful investigation and planning before going ahead with development work, are preventable, according to Stanley F. Morse, consulting agricultural engineer of New Orleans. "A small amount of money invested in the fee of an experienced agricultural engineer would have prevented the sinking of thousands of dollars in impracticable projects," says Mr. Morse, "while some of them might have been developed profitably through proper technical guidance."

"Good business men rarely undertake mining or industrial developments without first securing the best advice available from a reputable consulting engineer; yet these same men frequently invest money in agricultural enterprises without consulting a competent man," he states. "Perhaps the reason is that until recent years properly trained and experienced men in this line have not been available."

Some five years ago Mr. Morse found after investigation that the fertilizers in general used by the sugar planters of Louisiana were too expensive and not best adapted to cane growing. A new fertilizer was recommended and an increase in production secured of from 25 to 30 per cent with a reduction at the same time in the costs of fertilizer of about 25 per cent. In another instance a farmer was induced to convert an old corn crib into a weevil-proof building at a cost of \$600, this man saving \$1200 the first year in preserving the



Sorghum has proved to be a more economical silage crop than corn, yielding 50 per cent more per acre.



Cotton can grow so rank that it produces little fruit and shelters the weevil. A change in cultural methods is needed.

The foregoing illustrations are offered by Mr. Morse to show that accurate records and close watch kept on costs, combined with careful planning of crop and livestock operations, make for success. "It is not a new thing," he says, "to see an organization handling factories, public utilities and other industrial enterprises, but many are just waking up to the

fact that an organization of experienced, practical agricultural specialists can manage farms and plantations better than the average individual—and is more responsible. It is believed that this plan may afford a solution of the management problem to many companies and individuals who are desirous of developing agricultural enterprises in the South."

A Fair Statement of the Financial Crime of Deflation.

J. C. BYARS, JR., Treasurer, Alcoa Improvement Co., Inc., Arlington, Virginia.

Like thousands of other victims of the Reserve Board's idiotic deflation policy, for the past two years I have been hesitating between bankruptcy and suicide.

In January 1920 when Governor Harding announced his determination to deflate business to meet his contracted ideas of credit, I protested to Governor Harding and other members of the Reserve Board that such a course as they seemed bent on following would be a "crime against humanity."

Measured by human misery or dollars and cents, the policy of the Federal Reserve Board has cost this nation and the world more than the war. Millions of people have starved to death in Europe and Asia while food was rotting on American farms, and hundreds of vessels rusting in our harbors. Other millions have walked our streets in idleness and poverty, while more millions were crying for homes. With three-fifths of the world's gold in its vaults, the Reserve Board made it impossible to get a dollar for home building. Many thousands of our own people have committed suicide and others gone into bankruptcy—victims of a policy deliberately planned and relentlessly executed by men who had the power but absolutely no justification for precipitating a money stringency or business depression at that time, when the world needed everything our farms and factories could produce.

After announcing what they proposed to do by contraction and deflation, for the first year they boasted of what they had accomplished, but now when the wreck and ruin they have wrought seems to be dawning upon them, they have the brazen audacity to disclaim responsibility.

They were warned by your paper what would happen if they persisted in their destructive policy, and by thousands of others who could visualize the inevitable results of credit contraction at a time when this nation needed more credit to help build a wrecked hemisphere than ever before in its history. The Reserve Board was abundantly able to extend this credit, through its Regional Banks, but just at the time when business was needing money most, it started its propaganda of contraction and raised the discount rate. Those who contend that the policy of the Reserve Board has nothing to do with the business depression or low prices of farm products are merely showing their ignorance. They see things hind end foremost. We need at the head of the Reserve Board a man who has vision and can see the potentialities of American enterprise—not a man blinded by gold dollar goggles, moving backwards with his finger on the black line of a chart prepared by a \$40 clerk in Babson's School of Politics and Business. Governor Harding and all like him connected with the Reserve Board should be forced to resign, or be removed.

Oliver Bowles, mineral technologist of the Bureau of Mines, is collecting data on methods employed at marble quarries and dressing plants in Tennessee. This work, being conducted in co-operation with the U. S. Geological Survey and the State Geological Survey, will provide information supplementary to that contained in Bulletin 106, "Technology of Marble Quarrying."

Wants a Uniform Ton of 2000 Pounds.

PORTER WARNER, Chattanooga, Tenn.

Now, while business is at low ebb and while we have "something to think about" don't you think it a good idea to get Congress to establish a *uniform ton* of 2000 pounds *even*, and let's cut out this *long ton*, 2240 pounds.

Let everything be based on 2000 lbs.—what difference does it make in the long run whether it is feathers or iron? It will make much less work in the way of estimating and will be much simpler. I can't see why everybody would not welcome such a change.

You can readily see how confusing it is when we sell bauxite for instance at so much per gross ton, and the freight rates are so much per short ton. It is just as sensible to make a ton 2000 lbs. as it is to make a cut 100 lbs. and I hope you will look at it the same way and for the sake of everybody once and for all let's get up enough interest on this subject to establish a 2000 lbs. ton and let this apply to everything and discard the long ton absolutely.

I don't know of anyone that is more suited to bring this matter before the public than you are and I trust you will find it of enough importance to help get it started.

Heavy Express Charges on Farm Produce.

J. T. THOMAS, President Grenada Bank, Grenada, Miss.

Knowing your great interest in the agricultural and rural sections of our country, as evidenced from time to time by your splendid editorials on the subject, I am taking the liberty of enclosing herein a bill for one crate of cabbage, weighing 110 lbs., cost \$1.40, transported by the American Express Co., 294 miles, at a charge of \$1.62. No doubt the broker who rendered the bill paid the farmer 50 cents for the cabbage, whereas if the charge made by the express company for transportation had been more equitable and just, the broker might have paid the farmer \$1.50.

You might better understand why the charge made should be more reasonable when we tell you that oftentimes the express company carries from one to four cars, often more, over the same line in one train. It would seem that the Government protects in a way the express company with but scant regard for the producer, who, in the last analysis, is the bone and sinew of every community, and to whom all in this section look for success and prosperity.

PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS

Bids close June 1, 1922.

Sealed proposals will be received at the office of the General Treasurer, National Home for Disabled Volunteer Soldiers, until 1 o'clock P. M., June 1, 1922, and then opened, for furnishing and delivering supplies (clothing, chinaware, bedding, stationery, etc.), for the year ending June 30, 1923. Copies of instructions and specifications can be had upon application to C. W. Wadsworth, Gen. Treas., National Military Home, Dayton, O.

Bids close June 5, 1922.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., May 8, 1922—SEALED PROPOSALS will be opened in this office at 3 p. m., June 5, 1922 for the construction of the United States Post Office at Front Royal, Va. Drawings and specifications may be obtained from the Custodian of the site at Front Royal, Va., or at this office, in the discretion of the Supervising Architect, Jas. A. Wetmore, Acting Supervising Architect.

Bids close May 25, 1922.

DEPARTMENT OF THE INTERIOR, Washington, D. C., May 1, 1922—SEALED PROPOSALS, in duplicate, will be received at this Department until 3 o'clock P. M., Thursday, May 25, 1922, and then opened, for lithographing, printing and mounting 20,000 copies, more or less, of the General Land Office map of the United States for 1923. At the same time and place proposals, in duplicate, will also be opened for photo-lithographing and printing 3000 copies, more or less, of each of the maps of the public land states and insular possessions prepared in the General Land Office during the fiscal year ending June 30, 1923, contracts awarded subject to appropriation by Congress to meet the expense. Specifications as to the character of the work, size of maps, and quality of paper required will be exhibited to bidders or furnished on application to Room 330, General Land Office, Interior Department Building, 18th and F Streets, N. W., Washington, D. C. All proposals must be securely enveloped and marked "Proposals for United States Map" or "Proposals for State Map," as the case may be, and addressed to the Commissioner of the General Land Office, Washington, D. C. The right is reserved to reject any and all bids, or to accept or reject any part thereof in the discretion of the Department. (Signed) F. M. GOODWIN, Assistant Secretary.

Bids close May 25, 1922.

United States Engineer Office, Room 904, Bell Building, Montgomery, Ala. Sealed proposals will be received here until 12 M., May 25, 1922, and then opened, for purchasing and removing wreck of Battleship "Massachusetts," now lying off entrance to Pensacola Harbor, Florida. Information on application.

Bids close June 5, 1922.

\$55,000 6% Bonds

Ellisville, Miss.
\$55,000 Jones County, Mississippi School and Colony for the Feeble-minded bonds, 6% payable semi-annually.
Sealed bids to be filed with Clerk of Board of Laurel by 12 M., June 5th, 1922, accompanied by certified check for \$100.
U. S. COLLINS, Clerk.

Bids close June 1, 1922.

\$80,000 6% Municipal Bonds

The Town of Durant, Miss., offers its 6% interest-bearing Bonds to the amount of \$80,000, running for a period of 25 years, \$1000 maturing annually for the first five years; \$3200 annually for the succeeding ten years; and \$4000 annually for the last ten years. Bids for the entire issue or for part of same will be received up to June 1, 1922. A certified check for 5% of the amount bid is required with the bid.
The right to reject any and all bids is reserved.

D. V. POUND,
Mayor of Durant, Miss.

Bids close May 22, 1922.

\$10,000 6% Paving Bonds

Bushnell, Fla.
Notice is hereby given that bids will be received at the Office of the City Clerk of the City of Bushnell, Fla., up to 8 o'clock P. M., on Monday, the 22nd day of May, 1922 for the ten \$1000 Paving Bonds of the City of Bushnell, said bonds being dated July 1st, 1921, maturing one bond five years from date thereof and one each year thereafter until all are paid, drawing interest at 6 per cent, interest payable semi-annually.

Bidders required to deposit with bid 2 per cent of bid as evidence of good faith. The City Council reserves the right to reject any and all bids.

C. B. ALLEN, Clerk.

Bids close June 7, 1922.

\$50,000 6% Time Warrants

Sealed bids will be received by Board of County Commissioners of St. Lucie County, Florida, up to two o'clock p. m., June 7, 1922, for \$50,000 6% Coupon Time Warrants, dated July 1, 1922; semi-annual interest; \$1000 each; maturing two Warrants each year 1923 to 1932, inclusive, and three Warrants each year 1933 to 1942, inclusive. Certified check for \$1000 must accompany each bid. For further information address P. C. Eldred, Clerk, Fort Pierce, Florida.

Bids close May 29, 1922.

\$500,000 6% Drainage Bonds

Fayette, Ala.

Notice is hereby given, that the Board of Drainage Commissioners of the Fayette and Lamar County Drainage District No. 1, offers for sale \$500,000 Serial Coupon Drainage Bonds of said District, less such amounts as shall have been paid in by landowners in said District, in cash, to the County Treasurer, on or before the 27th day of May, 1922, said bonds to be dated June 1, 1922, and to mature as follows:
In ten equal installments, one each year, beginning on the 1st day of June, 1927, said bonds to bear interest from date of issue, at the rate of six per cent, per annum, payable semi-annually.

The name of the bank or trust company at which the interest coupons and the principal of said bonds are to be made payable may subsequently be agreed upon between the Board of Drainage Commissioners and the purchasers of the bonds. The dating of said bonds may also be changed by agreement.

Sealed bids from prospective purchasers are invited, same to be filed with Marion L. Coons, Secretary Board of Commissioners, Fayette, Ala., on or before the 29th day of May, 1922, at 12 o'clock noon. Certified or cashier's check for \$2500, payable to the Board of Commissioners, of The Fayette and Lamar County Drainage District No. 1, must accompany each bid. All deposits of unsuccessful bidders will be returned.

The Board of Commissioners reserves the right to reject any and all bids.

WM. M. SUDDUTH, Chairman.
Board Drainage Commissioners.
M. L. COONS, Secretary.
Board Drainage Commissioners.

Bids close May 31, 1922.

**\$30,000 City Bonds
\$40,000 County Bonds**STATE OF SOUTH CAROLINA
COUNTY OF MCCORMICK

McCormick, S. C.,

May 10, 1922.

Notice is hereby given that sealed bids will be received by the Town Council of the Town of McCormick and the Board of County Commissioners for the County of McCormick and State aforesaid up to 12 o'clock noon, May 31, 1922, at the office of the undersigned in the town of McCormick, South Carolina.

1. For \$30,000 of coupon Bonds of the Town of McCormick, to be dated the 15th day of June, 1922, bearing a rate of interest not exceeding 6 per cent, payable semi-annually on the 15th day of June and the 15th day of December of each year, with both principal and interest payable at some bank in New York. Such bonds payable 40 years after date, redeemable at the option of the said Town within 20 years and to be in such denominations as may be agreed upon between the purchaser and the said Town.

2. For \$40,000 of Coupon Bonds of the County of McCormick to be dated the 15th day of June, 1922, and bearing a rate of interest not exceeding six per cent, payable semi-annually on the 15th day of June and the 15th day of December of each year, with both principal and interest payable at some bank in New York. Such bonds to be redeemable 20 years from date thereof.

A certified check for the sum of \$500 payable to J. H. Lyon, Supervisor of McCormick County, must accompany each bid before the same shall be considered. Checks of unsuccessful bidders will be returned.

The sale of County bonds set out in paragraph two are contingent upon the sale of the Town of McCormick bonds set out in paragraph one, and the Board of County Commissioners of the County of McCormick reserves the right to accept or reject any bids made for the County Bonds until after the sale of the Town Bonds.

The Town Council of the Town of McCormick and the Board of County Commissioners for the County of McCormick, specifically reserve the right to reject any and all bids for the said bonds or any part thereof.

L. L. RANKIN, Clerk,
Board of County Commissioners
and City Council.

Bids close May 27, 1922.

\$200,000 5% School Bonds

Charleston, S. C.

Sealed bids will be received by the Chairman and Clerk of the City Board of Public School Commissioners for the City of Charleston, for the purchase of (\$200,000) Two Hundred Thousand Dollars par value of School District of the City of Charleston, S. C., bonds.

Bonds are in denominations of One Thousand dollars each, are to be dated July 15th, 1922, bear interest at the rate of five per cent per annum, payable semi-annually on July 15th and January 15th of each year, and are to mature July 15th, 1947; both principal and interest payable at the Hanover National Bank in the City of New York.

Bids will be received until May 27th, 1922, at 12 o'clock noon, and should be addressed to A. B. RHETT, Clerk of City Board of Public School Commissioners for the City of Charleston, Memminger School Building, St. Philip Street, Charleston, S. C.

No bid will be considered unless accompanied by Cashier's check or certified check for \$2500 on a responsible bank, drawn to cash; and if two or more responsible bidders have made the same bid and such bid is the highest and the Certificates so bid for by such highest responsible bidders are in excess of the whole amount of Certificates as offered for sale, then such Certificates of Indebtedness may be awarded in a ratable proportion to such responsible bidders bidding the same price.

The undersigned may, in their discretion, accept one bid for all of said loan or separate bids for parts of said loan as may produce the largest amount, and they may in their discretion, accept bids which may be for part of said loan, but are not for all, and they reserve the right in their discretion to reject all bids or any part.

The Certificates of Indebtedness awarded will be delivered to the successful bidder or bidders upon receipt of the amount of the successful bid or bids on Thursday, June 15, 1922, at the office of the State Treasurer, Annapolis, Md.

GEORGE H. MOFFETT, Chairman,
A. B. RHETT, Clerk,
City Board of Public School
Commissioners for the City
of Charleston.

Bids close June 5, 1922.

\$750,000 5% Road and Bridge Bonds

Highlands Special Road and Bridge District of Pasco County, Florida, offers \$750,000 five (5%) per cent serial bonds until 2 o'clock P. M., June 5th, 1922.

A. J. BURNSIDE, Clerk Board Co. Comm.,
Dade City, Florida.

Bids close June 13, 1922.

\$1,500,000 4½% "Lateral, Post Road & Bridge Loan of 1922."STATE OF MARYLAND
TREASURY DEPARTMENT

Annapolis, Md., May 3, 1922.

Pursuant to Chapter 203 of the Acts of the General Assembly of Maryland of 1922, providing for the issue of the Certificates of Indebtedness herein mentioned and described and pursuant also to a resolution of the Board of Public Works of Maryland passed on April 21, 1922, and on file and open to inspection in the office of the said Board in Annapolis, Md., the Treasurer of the State of Maryland will receive bids or proposals for Certificates of Indebtedness of the State of Maryland as follows:

\$1,500,000 FOUR AND ONE-HALF PER CENT CERTIFICATES OF INDEBTEDNESS KNOWN AS "LATERAL, POST ROAD AND BRIDGE LOAN OF 1922."

Said Certificates of Indebtedness will all be dated June 15, 1922. They will bear interest at the rate of four and one-half per centum (4½%) per annum, payable semi-annually on the 15th days of December and June, respectively, in each and every year during the continuance of the loan. The principal of said loan will be payable upon the Serial Annuity Plan, as more fully set forth in said Act of 1922, Chapter 203, as follows:

Series.	Amount.	Redeemable
"A"	\$87,000.00	June 15, 1925
"B"	90,000.00	June 15, 1926
"C"	96,000.00	June 15, 1927
"D"	99,000.00	June 15, 1928
"E"	104,000.00	June 15, 1929
"F"	109,000.00	June 15, 1930
"G"	114,000.00	June 15, 1931
"H"	120,000.00	June 15, 1932
"I"	125,000.00	June 15, 1933
"J"	131,000.00	June 15, 1934
"K"	136,000.00	June 15, 1935
"L"	142,000.00	June 15, 1936
"M"	147,000.00	June 15, 1937

The said Certificates of Indebtedness will be of the denomination of \$1000 each, subject to registration as to principal and all will be issued with interest coupons attached.

This loan and the interest payable thereon is exempt from the Federal income tax and from State, county and municipal taxation.

The said bids or proposals must be delivered to the Treasurer of the State at his office in Annapolis, Md., before 12 o'clock noon on TUESDAY, June 13, 1922. Each bid must be for cash on delivery, must be enclosed in a sealed envelope addressed on the outside "Proposal for Lateral, Post Road and Bridge Loan of 1922." Each bid must be accompanied by a certified check upon some responsible banking institution drawn to the order of the Treasurer of Maryland for five per centum (5%) of the par value of the amount bid for. All bids or proposals will be opened at 12 o'clock noon on Tuesday, June 13, 1922, in the presence of the undersigned.

On the opening of said proposals as many of said Certificates of Indebtedness as have been bid for, not exceeding, however, the amount for which proposals are invited, may be awarded by the Governor, the Comptroller of the Treasury and the Treasurer, or a majority of them, to the highest responsible bidder or bidders, therefor, for cash; and if two or more responsible bidders have made the same bid and such bid is the highest and the Certificates so bid for by such highest responsible bidders are in excess of the whole amount of Certificates as offered for sale, then such Certificates of Indebtedness may be awarded in a ratable proportion to such responsible bidders bidding the same price.

The undersigned may, in their discretion, accept one bid for all of said loan or separate bids for parts of said loan as may produce the largest amount, and they may in their discretion, accept bids which may be for part of said loan, but are not for all, and they reserve the right in their discretion to reject all bids or any part.

The Certificates of Indebtedness awarded will be delivered to the successful bidder or bidders upon receipt of the amount of the successful bid or bids on Thursday, June 15, 1922, at the office of the State Treasurer, Annapolis, Md.

Bidders are referred to the said Chapter 203 of the Acts of the General Assembly of Maryland of 1922, as containing the full terms and provisions of this loan.

The constitutionality and validity of said Act of Assembly authorizing the issuance of said Certificates of Indebtedness have been favorably passed upon by the Attorney General of Maryland, who will also certify that all necessary legal formalities prescribed for said issue have been duly complied with.

ALBERT C. RITCHIE, Governor,
WILLIAM S. GORDY, JR.,
Comptroller of the Treasury,
JOHN M. DENNIS, Treasurer.

Bids close May 23, 1922.

Road ConstructionSTATE OF MARYLAND
STATE ROADS COMMISSION
NOTICE TO CONTRACTORS

Baltimore, Md.

Sealed proposals for building four sections of State Highway, as follows:

Howard County, Contract No. HO-21. One section of State Highway from end of Contract No. HO-13, toward the Montgomery County Line, for a distance of 3.0 miles. (Concrete.)

Baltimore County, Contract No. B-51. One section of State Highway along Park Heights Ave. from end of Contract No. B-41 to the Caves Road, for a distance of 2.0 miles. (Macadam Resurfacing.)

St. Mary's County, Contract No. SM-16. One Section of State Highway from end of Contract No. SM-15 to Colton, for a distance of 3.48 miles. (Gravel.)

Cecil County, Contract No. CE-39. One Section of State Highway from Rowlandsville toward Five Points, for a distance of 0.91 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 23rd day of May 1922, at which time and place they will be publicly open and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 4th day of May, 1922.

L. H. STEUART, J. N. MACKALL,

Secretary, Chairman.

Bids close May 31, 1922.

Road Improvement

SUMTER COUNTY PERMANENT ROAD COMMISSION

Sumter, S. C.

NOTICE IS HEREBY GIVEN that sealed proposals will be received by the Sumter County Permanent Road Commission at the City Council Chamber in Sumter, S. C., until 10.00 o'clock A. M., May the 31st, 1922, for the Grading, Drainage Structures and several types of Hard Surface Pavement on the following roads:

STATESBERG ROAD—F. A. Project 163, approximately 3.64 miles.

CAMDEN ROAD—SEC. "A," approximately 1.74 miles.

PINEWOOD ROAD—approximately 450 miles.

CAMDEN ROAD—SEC. "B," (Grading only, 39,000 cubic yards) approximately 4.77 miles.

Bid on each road must be accompanied by bidders bond or certified check for \$2000. If the work is bid on as a whole, a check or bond for \$4000 must be submitted.

Plans for the work may be seen at the office of the Engineers, LEE, PENNELL & MURRAY, Sumter, S. C. Specifications and proposal forms may be obtained from the Engineers upon request accompanied by a check for \$5.00 which sum will be refunded if same are returned within 30 days after receipt of bids. Plans and proposal forms for F. A. Project No. 163 may be obtained from the State Highway Department, Columbia, S. C., for the sum of \$5.00.

The right is reserved to reject any or all bids and to waive all technicalities.

Sumter County Permanent
Road Commission.

LEE, PENNELL & MURRAY, Engrs.,
Sumter, S. C.

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